

Cytec Solvay Group

Final 2022 Annual Groundwater Performance Monitoring Report

1300 Revolution Street
Havre de Grace, Maryland
USEPA ID No. MDD 003 075 942

January 27, 2023

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Acronyms and Abbreviations

μg/L microgram per liter

1,1,2-TCA 1,1,2-trichloroethane

1,2-DCA 1,2-dichloroethane

2022 Annual PMR 2022 Annual Groundwater Performance Monitoring Report

Arcadis U.S., Inc.

BBL Blasland, Bouck & Lee, Inc.
CAO corrective action objective

CMS Report Corrective Measures Study Report

CMS Work Plan Corrective Measures Study Work Plan

COC constituent of concern

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D quantified in a secondary dilution (lab qualifier); compound was detected after dilution

DDC density-driven convection

ft feet

gpm gallon per minute

J estimated concentration (lab qualifier)

MCL maximum contaminant level

MNA monitored natural attenuation

msl mean sea level

NFPA National Fire Protection Association

O&M operation and maintenance

PCE tetrachloroethene

PMP Performance Monitoring Plan

PMR Performance Monitoring Report

POC point of compliance

POTW publicly owned treatment works

RCRA Resource Conservation and Recovery Act

Rd retardation factor

2022 Annual Groundwater Performance Monitoring Report

redox oxidation-reduction

RFI Report Resource Conservation and Recovery Act Facility Investigation Report

site Cytec facility, located at 1300 Revolution Street in Havre de Grace, Maryland

TCE trichloroethene

THM

TOC total organic carbon

USEPA United States Environmental Protection Agency

trihalomethane

UST underground storage tank

VC vinyl chloride

VOC volatile organic compound

Executive Summary

On behalf of Cytec Solvay Group (Cytec), Arcadis U.S., Inc. (Arcadis) prepared this 2022 Annual Groundwater Performance Monitoring Report (2022 Annual PMR) for the Cytec facility located at 1300 Revolution Street in Havre de Grace, Maryland (site). Environmental activities at the site are conducted in accordance with the requirements of Resource Conservation and Recovery Act (RCRA) Permit ID No. MDD 003 075 942, with oversight by the United States Environmental Protection Agency (USEPA) Region 3. The site's RCRA permit became effective on December 6, 2012.

This 2022 Annual PMR presents the 2022 groundwater analytical results, following implementation of the final remedy (a combination of groundwater use restrictions, enhancement of the existing groundwater stabilization system, and long-term monitoring) in January 2015. Annual performance monitoring was conducted in September 2022, in accordance with the monitoring program established in the Performance Monitoring Plan (PMP; Arcadis 2012b) and subsequent monitoring report recommendations.

Concentration trends for site constituents of concern (COCs) have demonstrated significant groundwater quality improvements (i.e., concentrations have decreased by orders of magnitude at many on- and off-site monitoring wells) since implementation of the interim remedial measures at the site, which were initiated in 1996. The groundwater quality improvements are the result of a combination of on-site mass removal, off-site mass flux reductions, and natural attenuation processes. Prior to operation of the expanded groundwater stabilization system in January 2015, elevated concentrations of 1,2-dichloroethane (1,2-DCA) remained at several locations, including intermediate monitoring well MW-6I and deep monitoring wells MW-3, MW-27, and MW-28D. Based on the 2022 performance monitoring results, nine of 19 monitoring wells are in compliance with corrective action objective (CAO) goals (i.e., no COCs exceeded their respective numerical CAO goals), as summarized in **Exhibit 1**, below.

Exhibit 1. 2022 Performance Monitoring Results Summary

Performance Monito Compliance with CAO COCs		Performance Monitoring Wells Not in Compliance with CAO Goals					
Monitoring Well ID Location/ Designation		Monitoring Well ID	Location/ Designation	COCs Exceeding CAO Goals			
MW-4	On site	MW-3	On site 1,2-DCA, methyler				
MW-8D	On site	MW-6I	On site	1,2-DCA, TCE			
MW-8S	On site	MW-13D	On site	1,2-DCA			
MW-12D	On site	MW-14I	Off site	1,2-DCA			
MW-12S	On site	MW-16	Off site	VC			
MW-14	Off site	MW-19D1	Off site	1,2-DCA			
MW-18	Off site	MW-23	Off site	1,2-DCA			
MW-20D1	Off site	MW-25I	On site	Chloroform, TCE			
MW-22D Off site		MW-27	Off site	TCE, VC			
Nation		MW-28D	On site	1,2-DCA			

Notes:

1,2-DCA = 1,2-dichloroethane

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VC = vinyl chloride TCE = trichloroethene

Six monitoring wells (MW-3, MW-12S, MW-12D, MW-13D, MW-19D1, and MW-20D1) are used for point of compliance (POC) monitoring during active operation of the groundwater stabilization system. At three POC wells (MW-12S, MW-12D, and MW-20D1), concentrations were less than the respective CAO goals for each COC. At downgradient POC well MW-19D1, the concentration of 1,2-DCA (52 micrograms per liter [µg/L]) exceeded the CAO goal of 5 µg/L in 2022, slightly higher than the 2021 result (30 µg/L). 1,2-DCA concentrations at this location were less than the CAO goal of 5 µg/L between 2014 and 2017: November 2014 (3.0 µg/L), June 2015 (1.6 µg/L), November 2015 (1.9 µg/L), and October 2017 (2.8 µg/L). As such, it is believed that the 2018 to 2022 detections of 1,2-DCA in downgradient POC well MW-19D1 are representative of a slug of mass located beyond the capture zone of the expanded groundwater stabilization system that is now passing through the downgradient portion of the site as monitored by well MW-19D1. It is expected that concentrations of 1,2-DCA will attenuate (reduce) through time at this location. This is further supported by the significant reduction in COC concentrations at off-site monitoring well MW-27 since expansion of the groundwater stabilization system in 2015.

At on-site POC monitoring well MW-3, 1,2-DCA, methylene chloride, and vinyl chloride (VC) were detected at concentrations exceeding their CAO goals. MW-3 is located at the former underground storage tank farm in the southern corner of the site. At MW-3, the methylene chloride concentration (27 μ g/L) was greater than its CAO goal of 5 μ g/L and less than its historical peak concentration of 15,000 μ g/L in October 1997. Methylene chloride was previously detected in 2020 (53 μ g/L) and 2021 (35 J [estimated concentration] μ g/L).

In 2022, the maximum detected concentration of methylene chloride in downgradient extraction well EW-02 was 140,000 µg/L. With the exception of EW-02 and MW-3, methylene chloride was not detected in 2022 in any of the other monitoring wells included in the PMP (Arcadis 2012b). Groundwater samples will continue to be collected from performance monitoring wells listed in Exhibit 1 including MW-3 and analyzed for methylene chloride to further evaluate the isolated detections observed to date. In general, concentrations of COCs have remained stable or decreased following implementation of the expanded groundwater stabilization system in January 2015. Exceptions include the presence of VC at MW-3 due to natural attenuation processes, and the recent presence of 1,2-DCA concentrations in downgradient well MW-19D1.

Furthermore, concentrations of the primary site COC, 1,2-DCA, have varied without clear trends since the last reporting period. The concentration of 1,2-DCA in EW-01 ranged from 350 μ g/L to 790 μ g/L in 2022, compared to 83 μ g/L to 1,100 μ g/L in 2021. In EW-02, the concentration of 1,2-DCA was 47,000 μ g/L in 2022, compared to a range of 1,800 D μ g/L (detected after dilution) to 17,000 μ g/L in 2021. EW-02 was only sampled once in 2022 due to a pump motor malfunction and groundwater extraction is expected to resume in January 2023.

Groundwater samples were collected from select monitoring wells and analyzed for biogeochemical parameters and degradation products to assess the biodegradation potential of the groundwater COCs and current groundwater oxidation-reduction (redox) conditions. The biogeochemical data collected to date indicate that the redox conditions range from mildly to strongly reducing. A degradation product, methane, was detected in one onsite well (MW-3), several off-site wells (MW-14I, MW-16, MW-18, MW-23, and MW-27), and downgradient POC wells MW-19D1 and MW-20D1. An advanced degradation product, ethene, was detected at significant concentrations (greater than 100 µg/L) in MW-27 from 2014 to 2022. The presence of these compounds indicates that 1,2-DCA, TCE, and their degradation products are readily attenuating, resulting in mass destruction within the off-site contaminant plume. Conservative fate and transport calculations were completed for 1,2-DCA to estimate the distance downgradient at which 1,2-DCA concentrations in groundwater become less than the CAO (5 µg/L).

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The results indicate that 1,2-DCA concentrations in well MW-19D1 attenuate to levels below the CAO before reaching the Chesapeake Bay at its closest point, approximately 632 feet downgradient of MW-19D1.

In 2022, 2,838,180 gallons of COC-impacted groundwater were extracted by the system and discharged to the local publicly owned treatment works, an approximate decrease of 11 percent compared to the extracted volume reported for 2021. The average monthly uptime for the system in 2022 was 74 percent, 2 percent lower than 2021. The three extraction wells were not operated as consistently in 2022 compared to 2021 due to prolonged EW-02 pump shutdown and unforeseen equipment failures that caused protracted system shutdowns. While biofouling of the well screens, pump motors, and subsurface piping network continues to hinder system performance, routine and proactive operation and maintenance activities conducted in 2022 optimized overall system performance, similar to 2021.

The observed water-level measurements indicate that under pumping conditions, the deep overburden zone is hydraulically captured across the entire width of the on-site impacted area. Moreover, the observation that COC concentrations in wells downgradient of the northeastern site boundary continue to demonstrate decreasing or stable trends provides further evidence of adequate hydraulic capture when the extraction wells are operating.

A combination of hydraulic capture, mass removal, mass flux reductions, and natural attenuation processes is continuing to improve groundwater quality at the site and inhibiting contaminant mass flux migration downgradient of the site boundary.

Continued operation of the groundwater stabilization system is recommended to maintain groundwater capture. Operation of the groundwater stabilization system is planned for at least 15 years (2015 through 2030). The eighth year of operation was performed in 2022. Continued annual groundwater monitoring is planned, with the next performance monitoring event tentatively scheduled for August 2023 followed by the 2023 annual PMR submittal by January 31, 2024. To maintain the operational capture zone of the groundwater stabilization system in 2023, an annual well rehabilitation and hydro-jetting event will be conducted, the pump at EW-02 will be replaced in January 2023, and pumps will be routinely cleaned throughout the year. Routine pipe cleaning will be conducted quarterly, or as needed based on well performance. Additionally, routine system inspections and timely leak repairs will facilitate continued system operation. Effluent samples collected during routine system inspections will be used to optimize the flow rate at each extraction well.

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1 Introduction

On behalf of Cytec Solvay Group (Cytec), Arcadis U.S., Inc. (Arcadis) prepared this 2022 Annual Groundwater Performance Monitoring Report (2022 Annual PMR) for the Cytec facility located at 1300 Revolution Street in Havre de Grace, Maryland (site). Environmental activities at the site are conducted in accordance with the requirements of Resource Conservation and Recovery Act (RCRA) Permit ID No. MDD 003 075 942, with oversight by United States Environmental Protection Agency (USEPA) Region 3. The site RCRA permit became effective on December 6, 2012.

The final remedy for groundwater is a combination of groundwater use restrictions, enhancement of the interim groundwater stabilization system, and long-term monitoring in accordance with the Final Decision and Response to Comments (USEPA 2012). A Performance Monitoring Plan (PMP; Arcadis 2012b) was subsequently prepared in 2012. This 2022 Annual PMR presents the eighth year (2022) of groundwater analytical results following implementation of the final remedy in 2015. Specifically, this 2022 Annual PMR describes the operational status of the groundwater stabilization system and current groundwater results and evaluates the extent of on-site capture and downgradient natural attenuation of the constituents of concern (COCs).

Pre-implementation groundwater sampling (performed prior to the 2015 modification of the groundwater stabilization system) was conducted in October and November 2014, as summarized in the Groundwater Monitoring Results Technical Memorandum (Arcadis 2015a). Construction and pre-implementation activities related to the expanded groundwater stabilization system are documented in the Corrective Measures Implementation Construction Completion Report (Arcadis 2015b).

Performance monitoring has continued annually in accordance with the PMP (Arcadis 2012b) and was modified pursuant to the recommendations outlined in subsequent Annual Performance Monitoring Reports (PMRs), as described below:

- 2016. Tetrachloroethene (PCE) and carbon disulfide were removed from the COC list based on analytical results, and total organic carbon (TOC) was added to the monitored natural attenuation (MNA) parameter list. The groundwater sampling method was modified to a passive sampler (HydraSleeve™) for use with both volatile organic compounds (VOCs) and MNA parameters. These modifications were presented in Section 7 of the 2015 Annual PMR (Arcadis 2016). Approval of these modifications was documented in comments on the 2015 Annual PMR, received from the USEPA via an electronic mail on August 2, 2016 (USEPA 2016).
- 2018. Monitoring wells MW-11D, MW-16, and MW-27 were reclassified as deep overburden wells in 2018. This proposed change was documented in the 2017 Annual PMR (Arcadis 2018). Approval of this change was documented in an electronic mail received from the USEPA on February 28, 2018 (USEPA 2018).
- 2020. Monitoring wells MW-6 and MW-15 were removed from the monitoring program in 2020 because no site COCs were detected at concentrations greater than laboratory reporting limits during the previous 5 years of monitoring. This proposed change was documented in the 2019 Annual PMR (Arcadis 2020). Approval of this change was documented in an electronic email from the USEPA on February 10, 2020 (USEPA 2020).

In September 2022, 19 wells were sampled for VOCs and eight wells were sampled for MNA parameters.

2 Site Background

Site background information including the site location, hydrogeologic setting, and groundwater characterization are presented below to assist in evaluating the performance assessment of the groundwater stabilization system and COC trends.

2.1 Site Location

The site occupies an approximately 27-acre parcel, located at 1300 Revolution Street in Havre de Grace, Maryland (**Figure 1**). The facility began operations on site in 1962, manufacturing structural adhesives for the aerospace industry. A portion of the facility was used to manufacture honeycomb core material used in conjunction with adhesives to form fuselage and wing components of aircrafts between 1981 and 1992. Currently, Cytec produces specialty bonding adhesives at this facility, including modified epoxy adhesives, adhesive primers, high-temperature resin systems, and thermoplastic materials (e.g., graphite, DECLAR®) for the aerospace industry.

As shown on **Figure 2**, the site is bisected by the Norfolk Southern Railroad and an intermittent stream (a branch of Lilley Run). The adhesives building is located on the western portion of the site. The facility warehouse occupies the eastern half of the site. **Figure 2** also shows the areas surrounding the site, which include a mixture of light industrial and high-density residential properties. No structures are currently present beyond the warehouse on the eastern portion of the site. The Havre de Grace wastewater treatment plant, a local publicly owned treatment works (POTW), is located immediately southeast of the site boundary.

2.2 Hydrogeologic Setting

Historically, overburden groundwater flow was interpreted by dividing the overburden into two separate water-bearing units, corresponding to the Upper and Lower Talbot formation. However, this interpretation was not able to accurately describe COC migration in groundwater at locations where multiple sand and gravel layers are present at different elevations within the Lower Talbot. Based on discussions with the USEPA during development of the Phase IV RCRA Facility Investigation Report (RFI Report; Arcadis 2008a, 2008b), a decision was made to subdivide the overburden into the following three water-bearing units:

- Shallow overburden zone. Consists of the silts and similar fine-grained materials present in the upper 10 to 20 feet of the overburden (on site).
- Intermediate overburden zone. Consists of the uppermost sand and/or sand and gravel layers that underlie the fine-grained materials of the shallow overburden zone in the upper 20 to 30 feet of the overburden (on site and at deeper depths off site).
- Deep overburden zone. Consists of a second zone of permeable sand and/or sand and gravel layers that
 occur below the intermediate zone at locations where a layer of lower permeability silty clay separates the
 intermediate and deep overburden into two separate flow zones in the upper 30 to 45 feet of the overburden
 (on site and at deeper depths off site).

As a result of these changes to the hydrostratigraphic conceptual site model, many of the existing monitoring wells were reclassified as either intermediate or deep overburden wells in the RFI Report (Arcadis 2008a, 2008b). The well specifications and water-bearing unit designations are presented in **Table 1**.

Groundwater flows generally from west to east across the site and surrounding area in each zone. The similarity in groundwater flow patterns is most apparent in the intermediate and deep overburden zones. This observation, supported by the detection of groundwater impacts in the intermediate and deep overburden zones, indicates that the sand and gravel layers within these two water-bearing units are hydraulically connected; however, geologic cross sections provided in the PMP (Arcadis 2012b) show that there are discontinuous silt and clay lenses in the intermediate and deep overburden zones.

The hydrogeologic setting is further discussed in Section 5 (Updated Site Conceptual Model) of the RFI Report (Arcadis 2008b) and Section 2.5 (Site Conceptual Model) of the Corrective Measures Study Report (CMS Report; Arcadis 2012a).

2.3 Monitoring Well Network

A monitoring well network was installed during previous site investigations and consisted of 33 on-site and 16 off-site monitoring wells (**Figure 2**). The current groundwater sampling program includes 19 monitoring wells as presented in **Table 2**. In 2022, one site-wide gauging event was conducted on September 13. An additional 15 on-site and five off-site monitoring wells were gauged but were not sampled as a component of the PMP (Arcadis 2012b). The groundwater stabilization system was operational and pumping during the gauging event, with the exception of extraction well EW-02 (further described in Section 4.1). The 2022 gauging activities are summarized on the well inspection checklists included in **Appendix A**.

2.4 Constituents of Concern and Groundwater Impacts

Historical site investigations have identified the following COCs for groundwater:

- 1,1,2-Trichloroethane (1,1,2-TCA)
- 1,2-Dichloroethane (1,2-DCA)
- Chloroform
- Methylene chloride (also commonly known as dichloromethane)
- PCE
- Trichloroethene (TCE)
- Vinyl chloride (VC)
- Carbon disulfide

In 2016, PCE and carbon disulfide were removed from the COC list due to limited detections. In 2022, the COCs present at elevated concentrations are 1,2-DCA, chloroform, VC, TCE, and methylene chloride as further described in Section 5.2. The predominant COC in groundwater is 1,2-DCA.

According to facility personnel, 1,2-DCA was used as a raw material and cleaning solvent at the site from approximately 1967 through July 1990. A 6,000-gallon underground storage tank (UST), located at the UST farm

at the southern corner of the site boundary near the adhesives building (**Figure 2**), was used to store bulk 1,2-DCA. The UST was removed in December 1991.

Methylene chloride, another COC in groundwater, was also used as a raw material and cleaning solvent at the site from approximately 1967 through April 2003. Methylene chloride was stored in a 6,000-gallon UST at the UST farm (removed in December 1991), in a 3,000-gallon aboveground storage tank from September 1992 through December 1993, and in 55-gallon drums until use was discontinued in 2003. Methylene chloride groundwater impacts are present in extraction well EW-02, which is downgradient of the drum storage area, as shown on **Figure 2**. There are no known historical or current uses of 1,1,2-TCA, chloroform, PCE, TCE, VC, or carbon disulfide at the site.

The results of previous site investigations suggest that groundwater impacted with 1,2-DCA in the vicinity of the adhesives building migrated downward and into the sand and gravel layers of the intermediate and deep overburden zones beneath portions of the site (Arcadis 2008b). Impacted groundwater then migrated downgradient through these two zones and off site to the northeast, where these zones are connected near monitoring well MW-27 (located off site, approximately 146 feet east of EW-01). From this point, the impacted groundwater continued to migrate through the intermediate overburden zone farther off site to the northeast, spreading into the deep overburden zone near monitoring wells MW-14 (located approximately 520 feet downgradient of MW-10D) and MW-18 (located off site, approximately 270 feet northeast of MW-10D), where the two flow zones separate again.

2.5 Interim Remedial Measures for Groundwater

Several interim remedial measures have been implemented to address impacted groundwater at the site, including a density-driven convection (DDC) groundwater treatment system (1996 to 1999), a NOVOCs[™] groundwater treatment system (1998 to 1999), and a groundwater stabilization system (2002 to 2014). Details pertaining to the implementation and effectiveness of the DDC and the NOVOCs[™] treatment systems are provided in the Phase II RFI Report (Blasland, Bouck & Lee, Inc. [BBL] 1998) and the CMS Report (Arcadis 2012a).

The interim groundwater stabilization system was originally installed in 2001 to control off-site migration of the dissolved-phase chlorinated VOC impacts in the intermediate and deep overburden groundwater at the northeastern site boundary. The interim groundwater stabilization system included one extraction well (former monitoring well MW-10D) and conveyed extracted groundwater to the City of Havre de Grace POTW. Operation of the interim system began in April 2002 and continued through mid-November 2014.

2.6 Final Remedy for Groundwater

As described in the Final Decision and Response to Comments for the site (USEPA 2012), the final remedy for groundwater is a combination of groundwater use restrictions, enhancement of the interim system, and long-term monitoring until corrective action objective (CAO) goals are met. Groundwater stabilization was implemented to reduce the migration of impacted groundwater across the site boundary. As part of the final remedy, the system was expanded to include the installation of two additional extraction wells (EW-01 and EW-02) to increase hydraulic control and further reduce the migration of impacted groundwater beyond the designated points of compliance (POCs) at the site boundary (refer to Section 3.1).

The groundwater stabilization system expansion was conducted between October and December 2014, and system shakedown and startup testing were conducted in January 2015. Construction and startup of the expanded stabilization system are documented in the Corrective Measures Implementation Construction Completion Report (Arcadis 2015b).

The extracted groundwater continues to be discharged directly to the POTW in accordance with permit number CYT-2013-101. Currently, groundwater is pumped from three extraction wells (EW-01, EW-02, and MW-10D) at specific rates based on mass loading estimations (Arcadis 2015b). Flow rates can be adjusted, as necessary, to optimize the hydraulic control of COC-impacted groundwater while adhering to the discharge limit requirements established by the POTW. The 2022 daily pumping volumes and average cumulative pumping rates per month are shown on **Figure 3**. These daily pumping volumes are presented to show system uptime (i.e., when the system was running). Extraction well EW-02 has not been pumping since March 2022 due to a failed motor, groundwater extraction is expected to resume in January 2023 (refer to Section 4.1).

3 Corrective Action Objectives

As stated in the PMP (Arcadis 2012b), the CAOs address COCs present in groundwater at the site and provide the basis for the formulation and development of the corrective measure selected in the CMS Report (Arcadis 2012a): On-Site Expansion of the Existing Groundwater Stabilization System. The CAOs for the final remedy at the site are as follows:

- Manage future site use such that residential land use within the site boundary is restricted.
- Minimize and/or manage exposure to groundwater containing COCs at concentrations greater than established performance goals at an appropriate point of exposure.
- Maintain no unacceptable population-level ecological risks.
- Restore groundwater to established performance goals to return groundwater to maximum beneficial use at an appropriate POC.

These goals are met through operation of the system as well as implementation of institutional controls and long-term monitoring of COCs and MNA parameters. The system is operated at the site to increase hydraulic control of COC-impacted groundwater and further reduce migration of COCs beyond the site POCs, thus reducing the potential risk associated with impacted groundwater.

3.1 Points of Compliance

POCs were selected throughout the area of COC-impacted groundwater based on the CAO to return groundwater to its maximum beneficial use. The POCs were selected using a throughout-the-plume/unit boundary approach. The POCs include two locations intended to provide information regarding the downgradient extent of COCs (MW-19D1 and MW-20D1, located approximately 1,325 feet downgradient from the northeast corner of the site) and four locations intended to provide information regarding migration of impacted groundwater across the site boundary (MW-12S, MW-12D, and MW-13D located along the northeast site boundary, and MW-3 located in the southeast corner of the site), as indicated in the PMP (Arcadis 2012b). The POC monitoring wells are presented in **Table 2**.

3.2 Numerical Performance Goals

In support of the CAOs, numerical performance goals were established based on USEPA maximum contaminant levels (MCLs) for groundwater. For COCs with no MCLs, USEPA Region 3 screening levels for tapwater were used, as described in the USEPA-approved Corrective Measures Study Work Plan (CMS Work Plan; Arcadis 2008c). **Table 3** identifies the COCs for groundwater at the site and their numerical CAO performance goals, as defined in the CMS Work Plan (Arcadis 2008c).

The approved numerical CAO for chloroform is the USEPA regional screening level of 0.19 micrograms per liter (μ g/L), which is lower than the typical laboratory reporting limit. Chloroform is regulated as a trihalomethane (THM) by the USEPA, which stipulates a cumulative THM MCL of 80 μ g/L. Chloroform results are compared to both screening levels in Section 5.2.

4 Site Activities

Site activities conducted in 2022 consisted of the following:

- Routine and non-routine operation and maintenance (O&M) of the groundwater stabilization system, including completion of a pipe jetting event, routine pump cleaning, and leak repairs.
- Annual groundwater sampling using passive samplers at the 19 performance monitoring wells for COCs and field parameters.
- Annual groundwater sampling at a subset of the 19 monitoring wells for MNA parameters (TOC, sulfate, iron [total and dissolved], and dissolved gases [ethene, ethane, and methane]).
- Completion of a site-wide synoptic groundwater elevation survey during a period of consistent groundwater stabilization system operation to enhance the ability to interpret groundwater flow direction at the site.

Site activities were conducted in accordance with the site-specific Health and Safety Plan (Arcadis 2022), standard operating procedures, the monitoring program requirements established in the PMP (Arcadis 2012b), and as modified in the subsequent annual reports (Arcadis 2016, 2018, 2020, 2021a, 2021b). The current performance monitoring program summary is presented in **Table 2**. **Figure 2** shows the groundwater monitoring well network.

4.1 System Operation

Two of the three extraction wells (EW-01 and MW-10D) in the groundwater stabilization system operated continuously except for short-duration shutdowns (**Figure 3**) in January, February, June, July, and August 2022. On January 20, 2022, POTW facility personnel notified Arcadis of a pipe leak at the POTW property, prior to the Cytec system water entering the digester, and the system was shut down. The pipe at the POTW was replaced on February 1, 2022, and the system was restarted. The system was shut down again due to another leak at the POTW on February 10, 2022, which was repaired on February 23, 2022 and the system restarted. On March 15, 2022, a P-300 overload fault alarm shut down the EW-02 pump. A new motor was ordered, repairs are anticipated to be completed and groundwater extraction is expected to resume in January 2023. On June 27, 2022, leaks within the system enclosure at MW-10D were identified and the system shut down. Leaked water was captured in the floor drain of the system enclosure and conveyed to the MW-10D well vault. Repairs were completed on July 15, 2022, and the system was returned to operational status. On July 7, 2022, the EW-01 transducer failed, but EW-01 remained operational. A replacement was ordered and installation was completed in December 2022.

Monthly uptimes were generally greater than 70 percent as summarized in Exhibit 2, below. The average monthly uptime for the system from December 2021 to December 2022 was 74 percent. Average monthly pumping rates in gallons per minute (gpm) accounting for downtime are also summarized in Exhibit 2, below, and shown on **Figure 3**.

Exhibit 2. 2022 Summary of Average Daily Flow Rates and Monthly System Uptime

Month	Average Daily Flow Rate (gpm)	Monthly Uptime (Percent)			
December 2021	1.9	26			
January 2022	1.2	16			
February 2022	3.5	54			
March 2022	6.4	94			
April 2022	5.7	83			
May 2022	6.2	97			
June 2022	6.5	90			
July 2022	3.3	48			
August 2022	6.0	81			
September 2022	7.4	100			
October 2022	7.2	100			
November 2022	6.4	90			
December 2022	4.9	87			
Average:	5.1	74			

4.2 System Sampling

Extraction well effluent and combined system discharge are analyzed for VOCs via USEPA Method 624 and for metals via USEPA Method 200.7 (Revision 4.4) as needed to assess system performance. Specifically, samples were collected on January 12, May 10, July 15, and October 11, 2022. Extraction well analytical results for 1,2-DCA and methylene chloride are presented in **Table 4**. The remaining constituent results are presented in the O&M laboratory reports (**Appendix B**). Extraction well effluent samples are collected while the system is running. Because EW-02 was not pumping after March 2022, samples were not able to be collected from this extraction well for the May, July, and October 2022 sampling events.

The semiannual combined system effluent samples were collected in May and October 2022 and analyzed for semivolatile organic compounds via USEPA Method 625, VOCs via USEPA Method 624, metals via USEPA Method 200.7 (Revision 4.4), mercury via USEPA Method 245.1, and cyanide via USEPA Method SM 4500 to comply with the permit requirements established by the POTW. Samples were collected from the terminal point of discharge at the POTW (May 10 and October 12, 2022). The POTW's effluent limitations are presented in permit number CYT-2013-101. Analytical results were in compliance with the POTW's effluent limitations (**Appendix B**).

4.3 System Operation and Maintenance Activities

Quarterly system inspections and maintenance were conducted in 2022. Inspections include calibration of the pH probes, inspection and cleaning of flow meters and piping in the system enclosure, collection of groundwater elevations at the extraction wells, and collection of influent and effluent system samples as discussed in

Section 4.2. In 2022, routine O&M activities also included completion of a well rehabilitation (i.e., purging, surging, and brushing of the three extraction wells) and hydro-jetting events to proactively control biofouling within the system and minimize the impact of biofouling on overall system performance. These events were conducted from April 12 through 15, 2022. Consistent with the 2021 events, hydro-jetting was conducted using a trailer-mounted pressure washer. Water, obtained from an on-site hydrant, was jetted through the subsurface piping network from the extraction well vaults toward the system enclosure and vice versa. The collected water was containerized and transported to the POTW for disposal. Jetting of the discharge lines from the system enclosure to the POTW was conducted for the first 300 feet. Jetted water was collected at the terminal point of each jetted segment. Following jetting activities, each pump was removed from its extraction well, disassembled, cleaned, and inspected.

The well rehabilitation and hydro-jetting event positively affected the monthly average flow rates at MW-10D (the average flow rate increased from 4.8 gpm in April 2022 to 5.2 gpm in May 2022) and EW-01 (the average flow rate increased from 0.91 gpm in April 2022 to 0.99 gpm in May 2022). The pump at EW-02 is typically removed for cleaning/maintenance and replaced every quarter, or more frequently as necessary. Quarterly pump cleaning/maintenance will resume in 2023 following the new motor installation and the pump resumes operation. Flow from the extraction wells is also optimized during quarterly site visits to maintain a pH greater than 5.0 standard units in accordance with CYT-2013-101 permit requirements.

Routine and non-routine O&M activities, including system alarms, are summarized in **Table 5**, and details of all routine and non-routine O&M activities are included in **Appendix A**. Non-routine O&M activities including pipe and system monitoring equipment (pH and transducer probes uninterruptible power supply [UPS]) diagnosis and repairs were more frequently required in 2022 to maintain system operation. Equipment repairs including replacements of the motor at EW-02, transducer at EW-01 and UPS at the system panel were completed in December 2022. False alarms and additional system inspections remained consistent between 2021 and 2022, and facility representatives continued to assist with inspections and resetting the system as needed. False alarms included consistent P-100 and P-200 drive fault alarms, which have historically been associated with fluctuations in the power supply to the system enclosure; roughly the same number of false alarms were received in 2021 and 2022.

O&M activities were reported in greater detail in monthly status reports in accordance with the discharge permit requirements established by the POTW. Monthly compliance reports submitted from December 2021 through December 2022 are included in **Appendix C**.

4.4 Groundwater Elevation Measurements

Water-level measurements were collected from the monitoring well network in September 2022. The system was operational during the collection of these data, except for EW-02. Water-level measurements are presented in **Table 1**, along with well construction details.

4.5 Performance Monitoring

Groundwater samples were collected using HydraSleeves[™] on September 14 and 15, 2022 and submitted to Eurofins TestAmerica Laboratories, located in Pittsburgh, Pennsylvania, for analysis of site-specific VOCs via USEPA Method 8260C. HydraSleeves[™] were retrieved no less than 24 hours after deployment pursuant to the manufacturer's specifications. Select samples were also analyzed for MNA parameters, including sulfate via

USEPA Method 300.0, total and dissolved iron via USEPA Method 6020, TOC via USEPA Method 9060A, and dissolved gases (methane, ethane, and ethene) via Method AM20GAX. Dissolved gas samples were analyzed by Pace Analytical Energy Services LLC in Baton Rouge, Louisiana. The HydraSleeves™ were installed at the depths presented in **Table 1** and in accordance with manufacturer's specifications.

Samplers were deployed at two separate depth intervals in deep overburden zone monitoring wells MW-18 and MW-23. These two wells are screened across a layer of lower permeability silt, or silt and clay. By deploying the samplers at two intervals, the difference in dissolved-phase COC concentrations above and below the silt and clay layer can be assessed.

Water quality parameters (i.e., dissolved oxygen, oxidation-reduction potential, specific conductivity, temperature, and pH) were measured downhole following retrieval of each passive sampling device. Field documentation, including equipment calibration forms, sampling forms, and chain-of-custody documents, is included in **Appendix A**.

4.6 Data Validation and Usability

Arcadis personnel validated the analytical data collected during the groundwater monitoring events in accordance with USEPA Region 3 procedures (USEPA 1994, 1995) and professional judgment. Data validation included review of the laboratory report narrative for noted deficiencies and the potential impact to data usability; review of chain-of-custody documents, sample preservation, and sample receipt logs; and electronic data validation of selected quality control parameters. No major deficiencies were identified during the data validation process. Laboratory results and data validation reports are included in **Appendices D** and **E**, respectively.

5 Performance Monitoring Results

This section presents the 2022 performance monitoring results. Groundwater sampling and gauging logs are included in **Appendix A**. Laboratory analytical reports are included in **Appendix D**.

5.1 Groundwater Elevations

Depth to groundwater measurements were collected from the monitoring well network on September 13, 2022. The September gauging event was conducted during a period of consistent system operation and included the collection of water-level measurements at each monitoring well at the site. Results of the gauging event are presented in **Table 1**.

The groundwater monitoring network consists of wells screened in the shallow, intermediate, and deep water-bearing overburden zones. In addition to the 19 monitoring wells included in the performance monitoring program, depth to water measurements were collected at an additional 25 monitoring wells and three extraction wells in 2022 to better assess groundwater flow at the site. During this event, groundwater elevations in the shallow, intermediate, and deep monitoring wells ranged from 31.73 feet above mean sea level (msl) at MW-9S to 42.44 feet above msl at MW-4; 20.68 feet above msl at MW-15I to 43.97 feet above msl at MW-2; and -2.82 feet above msl at MW-19D2 to 34.74 feet above msl at MW-26, respectively. Groundwater elevations in 2022 were generally consistent with those in 2021.

Groundwater generally flows from west to east toward the Chesapeake Bay, and this year's field measurements are generally consistent with historical interpretations of site flow regimes. Evaluation of the groundwater measurements with respect to inferred capture and horizontal hydraulic gradient influenced by the groundwater stabilization system and flow conditions are discussed in Section 6.1.2. Groundwater elevation contours are shown on **Figures 4**, **5**, and **6**.

5.2 Groundwater Analytical Results

Analytical results, including water quality parameters, are presented in **Table 6**. COC trends are discussed in Section 6.1.3. The 2022 groundwater analytical results for the COCs identified at the site are summarized below:

- 1,1,2-TCA was not detected at concentrations exceeding its numerical CAO performance goal of 5 μg/L during the 2022 sampling event. Detections were observed at two monitoring wells, with the highest concentration of 1,1,2-TCA detected at MW-27 (2.2 μg/L).
- 1,2-DCA was detected at concentrations exceeding its numerical CAO performance goal of 5 μg/L at seven of the 19 monitoring wells during the 2022 sampling event. The highest concentration of 1,2-DCA was detected at MW-28D (1,600 μg/L).
- Chloroform was detected at a concentration exceeding its numerical CAO performance goal of 0.19 μg/L at one monitoring well during the 2022 sampling event (at a concentration of 0.76 J [estimated] μg/L at MW-25l). As previously noted, the numerical CAO performance goal for chloroform is less than the typical laboratory reporting limit (less than 1 μg/L). There were no detections greater than the THM MCL of 80 μg/L.
- Methylene chloride was detected at concentrations exceeding its numerical CAO performance goal of 5 μg/L at one monitoring well during the 2022 sampling event (at a concentration of 27 μg/L at MW-3, and a

duplicate concentration of 31 μ g/L). It should be noted that methylene chloride is generally present in the extracted groundwater effluent (see **Table 4**), based primarily on elevated detections in extraction well EW-02 (maximum 2022 detection of 140,000 μ g/L); however, these elevated detections appear to be localized to the EW-02 area.

- TCE was detected at concentrations exceeding its numerical CAO performance goal of 5 μg/L at three of the 19 monitoring wells during the 2022 sampling event. The highest concentration of TCE was detected at MW-6I (9.7 μg/L).
- VC was detected at concentrations exceeding its CAO performance goal of 2 μg/L at three of the 19 monitoring wells sampled during the 2022 sampling event. The highest concentration of VC was detected at MW-3 (with a concentration of 91 μg/L and an estimated duplicate concentration of 100 μg/L).

Based on a comparison to CAO goals, the primary COC in site groundwater is 1,2-DCA. During the 2022 monitoring event, 1,2-DCA results exceeded the CAO goal in 42 percent of the samples.1,2-DCA concentrations at the extraction wells have varied without clear trends since the last reporting period. The concentration of 1,2-DCA at EW-01 ranged from 350 μ g/L to 790 D μ g/L (detected after dilution), compared to 83 μ g/L to 1,100 μ g/L in 2021. At EW-02, the concentration of 1,2-DCA in January 2022 was 47,000 D μ g/L, compared to a range from 1,800 D μ g/L to 17,000 μ g/L in 2021. 1,2-DCA time-series results for the last five monitoring well sampling events and select extraction well sampling events are shown on **Figures 7** and **8**. Other COCs in samples with CAO goal exceedances include chloroform (5 percent), TCE (16 percent), VC (16 percent), and methylene chloride (5 percent). No detections of 1,1,2-TCA exceeded the CAO goal at the performance monitoring well locations.

6 Performance Evaluation

The interim groundwater stabilization system operated from 2002 through 2014 and consisted of groundwater extraction at MW-10D and the discharge of extracted groundwater to the City of Havre de Grace POTW. In January 2015, the system was expanded to recover groundwater from two additional extraction wells, EW-01 and EW-02. The primary purpose of the groundwater stabilization system is to reduce the migration of impacted groundwater across the site property boundary in accordance with the CAOs. The system design was based on analytical modeling used to predict the hydraulic influence of the two additional extraction wells (EW-01 and EW-02) near existing extraction well MW-10D. The results of the model predicted that the target pumping rates (MW-10D pumped at 6 gpm, EW-01 pumped at 3 gpm, and EW-02 pumped at 0.64 gpm) would be sufficient to control further off-site migration of impacted groundwater.

Conceptually, implementation of the expanded groundwater stabilization system is expected to remove contaminant mass and provide hydraulic control for on-site higher COC concentration areas. In turn, maintaining hydraulic control of the higher on-site COC concentration areas is expected to simultaneously reduce the mass flux migrating off site and enhance the migration of clean water (i.e., pore flushing) toward downgradient impacted areas. Performance of the expanded groundwater stabilization system is discussed in Section 6.1, including mass removal trends (Section 6.1.1), hydraulic capture analysis (Section 6.1.2), and COC trends (Section 6.1.3).

Other processes contributing to groundwater quality improvements include the biodegradation of site COCs. Consequently, supplemental MNA parameters have been collected to better understand the site geochemistry and the potential of biodegradation to contribute to water quality improvements. These data are discussed in Section 6.2.

6.1 Groundwater Stabilization System Performance

6.1.1 Mass Removal

In 2022, 2,920,663 gallons of COC-impacted groundwater (**Appendix F**) were extracted by the system and discharged to the local POTW, a decrease of approximately 11 percent compared to the extracted volume reported for 2021. The three extraction wells did not operate as consistently in 2022 when compared to 2021, due to the EW-02 motor failure and unforeseen equipment failures that caused protracted system shutdowns. However, system operation was maximized during 2022 through routine and proactive O&M activities, including completion of a combined mechanical well rehabilitation and hydro-jetting event to clear biofouling and scaling from well screens, routine pump and piping network cleaning, and leak repairs.

As presented in **Table 4**, 1,2-DCA and methylene chloride concentrations in the combined effluent decreased from 16,000 and 53,000 µg/L, respectively, in December 2014 (prior to operation of the expanded system) to 60 D µg/L and nondetect, respectively, in October 2022. 1,2-DCA and methylene chloride concentrations in the extraction wells were generally consistent during the sampling events conducted in 2022, except for the January 2022 sample from EW-02, which had 1,2-DCA and methylene chloride concentrations at the highest levels since 2018. The transient increases in concentrations at the extraction wells may represent plume equilibrium or back diffusion processes occurring during shutdown periods and appear limited in extent.

The estimated mass removed by the system in 2022 was approximately 30 pounds of 1,2-DCA and 83 pounds of methylene chloride, resulting in a cumulative total of approximately 582 pounds of 1,2-DCA and 1,053 pounds of methylene chloride removed since expansion of the groundwater stabilization system (**Appendix F**; **Figure 9**). The effluent data demonstrate that the system is continuing to remove contaminant mass, thus eliminating the mass flux downgradient of the site boundary.

6.1.2 Hydraulic Capture Analysis

The target hydraulic capture zone (**Figure 6**) for this analysis is based on the 2014 distribution of COC-impacted groundwater (primarily groundwater impacted with 1,2-DCA) (**Figure 10**). This width perpendicular to groundwater flow is approximately 575 feet (ft). To account for some uncertainty in the delineation, an additional 50 ft was added (i.e., 25 ft on each side), resulting in a total width of 625 ft.

Because COCs have not been detected above CAO goals to any significant extent in the shallow overburden zone within the site property boundary, the target hydraulic capture zone is restricted vertically to the intermediate and deep overburden zones with a focus primarily on the deep overburden zone.

The following sections present an evaluation of hydraulic capture at the site.

6.1.2.1 Groundwater Elevation Contours

In general, under pumping conditions, the deep overburden zone contours in the vicinity of all pumping wells show moderate cones of depression, indicating inward flow with a larger area of depression in the EW-01 and MW-10D area due to proximity to one another and higher flow rates (superposition). Under non-pumping conditions, the contours showed no inflection with groundwater flow generally to the east toward the Chesapeake Bay. The intermediate potentiometric surface maps developed under both pumping and non-pumping conditions have not demonstrated any discernible variation in the contours.

The deep overburden groundwater elevation contour map (Figure 6) is used to estimate the interpretive capture zone. Note, according to USEPA guidance (2008), hydraulic heads measured at extraction wells should not be used to interpret hydraulic capture and groundwater flow patterns. However, the hydraulic head local to the extraction well can be estimated by correcting the measured water level at the extraction well for well losses based on the flow rate resulting in a higher groundwater elevation in the extraction well. As such, the groundwater elevation measured at EW-01 (25.68 ft above msl) was corrected utilizing the Bierschenk and Hantush graphical method from historical step testing data according to USEPA guidance (2008). The resulting corrected water level is 27.90 ft above msl at EW-01. Since EW-02 was not operating during the site-wide gauging event in September 2022, the groundwater elevation of 30.37 ft above msl was not corrected. Step testing data were unavailable for MW-10D; therefore, this correction method was not used. However, the corrected groundwater elevation in the vicinity of pumping well MW-10D (26.76 ft above msl) was estimated based on a drawdown of 4.15 ft and a well efficiency operation of 75 percent. The well efficiency of 75 percent was estimated based on application of the Theis equation using the theoretical drawdown compared to the actual drawdown from hydraulic testing completed in 1999 (BBL 2000). These corrected levels were used when developing the deep overburden groundwater elevation contour map for fall 2022 (Figure 6). The interpretative capture zone based on the pumping influence was inferred by drawing perpendicular flow lines to the fall 2022 potentiometric surface in the vicinity of the extraction wells. As shown on Figure 6, the interpretative capture zone for the groundwater

stabilization system extends approximately 605 ft in width across the site and extends both north and east across the site property boundary.

Overall, deep overburden zone water-level contours show inflection due to pumping (inward flow toward the pumping wells with exception of inactive EW-02), while intermediate overburden water-level contours indicate little horizontal hydraulic influence based on a review of the groundwater elevation contour maps. The interpreted capture zone for the deep overburden zone fully encompasses the target capture zone of the site.

6.1.2.2 Profile Flow Nets

Groundwater flow for fall 2022 (pumping conditions) was also contoured in vertical section as profile flow nets (**Figures 11** through **14**). The profile flow nets are generalized contours overlain on each geologic cross section (A-A' through C-C') developed by using groundwater elevations posted at the midpoint of the respective well screen. Hydrogeologic characteristics of the lithology and pumping influence were taken into consideration where possible when drawing the contours. The interpreted groundwater flow is also presented as arrows drawn perpendicular to the potentiometric contour lines. The approximate extent of current 1,2-DCA concentrations exceeding 5 μ g/L, the CAO goal, are also included on each cross section.

The dominant flow pattern observed in the profile flow nets is downward near the extraction wells that were active (MW-10D and EW-01) where the potentiometric surface is greatest in the shallow and intermediate zones. The concentric patterns centered on active extraction wells (e.g., EW-01 on cross section B-B; **Figure 13**) indicate the influence that extraction wells have on surrounding groundwater. The central portion of cross section A-A' indicates a change from downward flow near the extraction wells on site to upward flow at MW-14I/MW-14 (**Figure 12**), which is consistent with the conceptual site model.

The 1,2-DCA plume extent is primarily located around the extraction wells and within the capture zone, although, as discussed in Section 6.1.5.1.2, a slug of mass is migrating downgradient beyond the capture zone of the expanded stabilization system; this slug is expected to attenuate over time.

6.1.3 Constituent of Concern Trends

Historical groundwater analytical results for site monitoring wells are included in **Appendix G**. COC trend plots for select monitoring wells are included in **Appendix H**. These appendices include historical groundwater sampling results since 1990. During development of the historical trend plots included in **Appendix H**, it was noted that high historical 1,2-DCA detections in some samples resulted in elevated nondetect reporting limits for other COCs. To observe clear trends on the trend plots, nondetect results are plotted at the same value (1 µg/L).

6.1.4 Fate and Transport Estimate

Concentrations of 1,2-DCA in groundwater exceed the CAO (5 ug/L) at downgradient monitoring well MW-19D1. Fate and transport calculations were performed using deep zone hydraulic parameters (hydraulic conductivity, hydraulic gradient), 1,2-DCA concentrations, attenuation factors (degradation rate, organic carbon content), and zone characteristics (grain size, density, and porosity) to estimate the distance beyond MW-19D1 at which 1,2-DCA concentrations in groundwater become less than the CAO. Calculations were performed using recently observed 1,2-DCA concentrations (September 2022) from MW-19D1. The average horizontal hydraulic gradient was calculated from four monitoring wells (MW-15, MW-23, MW-20, and MW-19D1) and was approximately

0.009 ft/ft. Note that the horizontal hydraulic gradient calculation (and the resulting groundwater flow velocity) is conservative as the calculation assumes a constant gradient and does not take into account variation from Chesapeake Bay tidal influence. The site hydraulic conductivity (K of 30 ft per day) used in the calculations was taken from the groundwater analytical model presented in the 2019 Annual PMR (Arcadis 2020). Assuming an effective porosity of 15 percent, the groundwater flow velocity was estimated to be approximately 1.8 ft per day or 657 ft per year. The actual transport rate of 1,2-DCA would be less than groundwater due to retardation (Rd) factors. Based on published values for similar soil types for organic carbon and bulk density (Fetter 2001; USEPA 1996, 2021), the Rd for 1,2-DCA was calculated to be 1.39.

Time and distance calculations were completed based on conservative values from site-specific information, published values described above, and the current concentration of $52 \,\mu\text{g/L}$ at MW-19D1. The calculation result is presented below in Exhibit 3 and indicates that 1,2-DCA concentrations are calculated to attenuate to less than the CAO of $5 \,\mu\text{g/L}$ at an estimated distance of 501 feet downgradient of MW-19D1. Thus, 1,2-DCA concentrations in well MW-19D1 will attenuate to concentrations less than the CAO before reaching the Chesapeake Bay at its closest point located approximately 632 feet downgradient of MW-19D1.

Exhibit 3. Time and Distance Calculation Results

coc	Site-Specific CAO	Attenuation Rate (half-	Estimated Distance for 1,2-DCA to Attenuate below CAO (ft)			
	(μg/L)	life in days)	K = 30 ft/day			
1,2-DCA	5	114	501			

6.1.5 Discussion of Final Remedy Performance

The observed water-level data indicate that under pumping conditions, the deep overburden zone is hydraulically captured across the entire width of the on-site impacted area. The observation that COCs in wells downgradient of the northeastern site boundary continue to demonstrate decreasing or stable trends (i.e., MW-27, MW-18, MW-16, and MW-14, **Appendix H**) is further evidence that adequate hydraulic capture is occurring.

To maintain and enhance the operational capture zone of the groundwater stabilization system in 2023, an annual well rehabilitation and hydro-jetting event will be conducted in addition to routine pump cleaning throughout the year. Routine pipe cleaning will be conducted quarterly, or as needed based on well performance. Additionally, routine system inspections and timely leak repairs will facilitate continued system operation. Effluent samples collected during routine system inspections will be used to optimize flow rate at each extraction well. The effective hydraulic capture is continuing to improve groundwater quality at the site and eliminate contaminant mass flux downgradient of the site boundary.

It is expected that the expanded groundwater stabilization system will continue to operate until the magnitude and extent of groundwater impacts have been reduced to a point that natural attenuation processes will be sufficient to continue groundwater quality improvements to meet CAO goals. Annual performance monitoring of system operations is conducted to assess the long-term trends in response to implementation of the expanded system. Part of these evaluations include monitoring COC trends at six POC monitoring wells (MW-3, MW-12S, MW-12D,

MW-13D, MW-19D1, and MW-20D1) within and at the leading edge of the COC-impacted groundwater, as established in the PMP (Arcadis 2012b).

Eight monitoring events have been conducted since November 2014, with seven events occurring after implementation of the expanded groundwater stabilization system in January 2015. Groundwater analytical results for 1,2-DCA for the last seven monitoring events and concentrations first measured at each location following well installation are shown on **Figures 7** and **8**.

6.1.5.1 1,2-Dichloroethane

Prior to operation of the expanded system in January 2015, concentrations of 1,2-DCA greater than 100 μ g/L remained at several locations, including intermediate monitoring wells MW-6I and MW-13D and deep monitoring wells MW-3, MW-16, MW-18, MW-27, and MW-28D. As shown in **Appendix H**, 1,2-DCA concentrations exhibit a stable to decreasing trend at these monitoring wells following implementation of the expanded system in January 2015.

Table 7 presents the percent change in 1,2-DCA concentrations at intermediate and deep monitoring wells, calculated using historical maximum concentrations and baseline concentrations (prior to operation of the expanded system).

6.1.5.1.1 Intermediate Wells

As presented in **Table 7**, 1,2-DCA has exhibited a reduction of 94 percent or greater at each of the five intermediate wells when comparing 2022 concentrations to historical maximums, including on-site POC well MW-13D (greater than 99 percent reduction). Concentrations of 1,2-DCA were less than laboratory reporting limits at on-site POC well MW-12D and have exhibited a decreasing trend at off-site intermediate well MW-14I, with concentrations less than the CAO goal of 5 μ g/L from 2018 through 2021 and slightly above the CAO goal in 2022 (5.3 μ g/L). Concentrations of 1,2-DCA in intermediate wells overall have declined in 2021 and 2022 compared to concentrations observed from 2015 to 2020.

6.1.5.1.2 Deep Wells

1,2-DCA has exhibited a reduction of 55 percent or greater at seven of the 11 deep wells since operation of the expanded system began in January 2015: MW-3, MW-14, MW-16, MW-18, MW-20D1, MW-23, and MW-27. Concentrations of 1,2-DCA observed prior to operation of the expanded system and in September 2022 were less than laboratory reporting limits in MW-8D and less than 1.1 μ g/L in downgradient monitoring wells MW-20D1 and MW-22D.

Results from 2022 indicate:

- 1,2-DCA concentrations similar to 2021 results were observed at off-site deep monitoring wells MW-19D1 and MW-23, and were greater than the CAO goal of 5 μg/L. Prior to 2018, these wells generally demonstrated a decreasing or stable trend. At MW-19D1, concentrations of 1,2-DCA were less than the CAO goal of 5 μg/L in November 2014 (3.0 μg/L), June 2015 (1.6 μg/L), November 2015 (1.9 μg/L), and October 2017 (2.8 μg/L). Concentrations of 1,2-DCA at MW-19D1 have been stable since 2018, with a slight increase in 2022.
- At the lower sample interval of MW-23, concentrations of 1,2-DCA were also generally stable or declining from November 2014 (56 μg/L) to November 2018 (15 μg/L), with small increases in September 2019

- (19 μ g/L) and October 2020 (27 μ g/L). The concentration detected in September 2022 (9.5 μ g/L) was lower than the concentration in September 2021 (14 μ g/L).
- Analytical results observed in 2022 were generally consistent with 2021 results. It is believed that a slug of
 mass is migrating downgradient beyond the capture zone of the expanded stabilization system and
 concentrations of 1,2-DCA at these locations will attenuate (reduce) through time. Although 1,2-DCA
 concentrations remain greater than the CAO goal of 5 µg/L at seven of the 11 deep wells, generally
 decreasing trends are evident at most of these locations.

6.1.5.1.3 Point of Compliance Wells

At three POC locations (MW-12S, MW-12D, and MW-20D1), COC concentrations remained less than their respective CAO goals. 1,2-DCA was detected at concentrations exceeding the CAO goal of 5 μ g/L at MW-13D in 2019, 2021, and 2022, but concentrations had declined in 2020. At on-site POC monitoring well MW-3, 1,2-DCA was detected at a concentration exceeding the CAO goal of 5 μ g/L in 2022 (34 μ g/L). MW-3 is located at the former UST farm in the southern corner of the site. At downgradient POC well MW-19D1, the concentration of 1,2-DCA also exceeded the CAO goal of 5 μ g/L in 2022 (52 μ g/L), slightly higher than the 2021 result (30 μ g/L). Concentrations of 1,2-DCA at MW-19D1 have been generally stable since 2018.

6.1.5.2 Methylene Chloride

At MW-3, the concentration of methylene chloride (27 μ g/L) was greater than its CAO goal of 5 μ g/L and less than its historical peak concentration in October 1997 (15,000 μ g/L). Methylene chloride was also detected in 2020 (53 μ g/L) and 2021 (35 J μ g/L). In 2022, the maximum concentration of methylene chloride (140,000 μ g/L) was detected at downgradient extraction well EW-02. The groundwater extraction system was shut down for three weeks prior to the sampling event, likely resulting in a concentration that was biased high. Methylene chloride was not detected in the other monitoring wells identified in the PMP (Arcadis 2012b) in 2022. Groundwater samples will continue to be collected from performance monitoring wells, including MW-3, and analyzed for methylene chloride to further evaluate the isolated detections observed to date.

6.1.5.3 Other Constituents of Concern

In general, concentrations of other COCs have remained stable or decreased following implementation of the expanded groundwater stabilization system in January 2015; exceptions include general increases in VC concentrations at MW-3 (concentration increased from 17 to 190 μ g/L between 2017 and 2020, decreased to 59 J μ g/L in 2021 and 91 μ g/L in 2022). VC is a daughter product of TCE and 1,2-DCA, and increased concentrations of VC at this well is indicative of parent COC degradation, which is also supported by decreases in TCE and 1,2-DCA concentrations since 2017.

6.2 Monitored Natural Attenuation Assessment

This section discusses off-site and downgradient MNA conditions, with a focus on the biodegradation potential of groundwater COCs and current groundwater oxidation-reduction (redox) conditions. In addition, this section discusses the extent to which biodegradation is occurring based on the established redox conditions, COC trends, and/or presence of degradation products.

To support this evaluation, current biogeochemical data are presented in **Table 6**. In addition, a bar chart figure showing the ratios of COC compounds, advanced degradation products (ethene and ethane), and redox indicators (iron, sulfate, methane) is shown on **Figure 15**. The current COC detections were reviewed as a screening step to determine the dominant COCs in downgradient areas. The only COC widely detected in the offsite monitoring well network was 1,2-DCA. Since implementation of the PMP (Arcadis 2012b), the highest off-site concentration of 1,2-DCA has been observed at monitoring well MW-27 (12,000 μ g/L), located approximately 100 ft beyond the northeast site boundary. As presented in **Appendix H**, Figure H-16, 1,2-DCA concentrations at MW-27 have decreased from 12,000 μ g/L (December 2006) to 3 μ g/L (September 2022) and represent a downward trend. In 2022, 1,2-DCA exceeded its CAO goal of 5 μ g/L at the upper and lower intervals of monitoring well MW-23 (11/9.5 μ g/L), downgradient POC well MW-19D1 (52 μ g/L), and off-site monitoring well MW-14I (5.3 μ g/L). No other COCs were detected at concentrations greater than their respective CAO goals at the off-site monitoring wells.

Several known biological and abiotic processes can potentially contribute to the natural attenuation of 1,2-DCA. Aerobic oxidation is a microbial process where 1,2-DCA is used as a carbon source either solely or through cometabolic reactions. When used as a sole carbon source, chloroethanol is formed as an intermediate metabolite and is then mineralized to carbon dioxide and water. With biological reductive dechlorination, 1,2-DCA is sequentially degraded to chloroethane and ethane under anaerobic and reducing conditions. Hydrolysis of 1,2-DCA is slow and not a significant abiotic attenuation process. However, the reported half-life for chloroethane (a 1,2-DCA degradation product) via hydrolysis is faster, ranging from days to months. Biogeochemical reductive dechlorination is also a potential abiotic degradation process. Under iron- and sulfate-reducing conditions, surface reactions with the iron sulfide precipitates can degrade 1,2-DCA.

As presented in **Table 6**, select wells including on-site monitoring well MW-3 and off-site monitoring wells MW-14I, MW-16, MW-19D1, MW-20D1, MW-23, and MW-27 were analyzed for natural attenuation parameters, including sulfate, total and dissolved iron, TOC, and dissolved gases (methane, ethane, and ethene). The biogeochemical data collected indicate that redox conditions ranged from mildly to strongly reducing. Three of the monitoring wells sampled for natural attenuation parameters exhibited elevated dissolved iron concentrations. One on-site well (MW-3), several wells immediately downgradient of the site boundary (MW-14I, MW-16, and MW-27), and downgradient POC well MW-19D1 exhibited low, but elevated, methane detections typically greater than background levels. Methane was also detected in downgradient monitoring well MW-20D1 at a concentration of 180 μ g/L. The advanced degradation product, ethene, has been detected at significant concentrations (greater than 100 μ g/L) at monitoring well MW-27 since 2014 (730 μ g/L in 2022). The biogeochemical conditions along with the presence of these compounds suggests that 1,2-DCA and TCE are attenuating at wells MW-3, MW-14I, MW-16, MW-19D1, MW-20D1, and MW-27, and the natural attenuation processes are contributing to mass destruction.

7 Summary and Conclusion

Overall, a combination of on-site mass removal, mass flux reductions, and natural attenuation processes continue to improve groundwater quality on site and off site, and COC trends continue to demonstrate significant groundwater quality improvements since expansion of the groundwater stabilization system in 2015. A comparison of 1,2-DCA isoconcentration plume contours between 2014 and 2022 (as depicted on **Figure 10**), shows that the plume footprint is shrinking, with a portion of the off-site plume moving toward the northeast since expansion of the groundwater stabilization system in 2015. There are no known locations with sensitive receptors downgradient of the plume (e.g., schools, hospitals), and the Chesapeake Bay at its closest point is approximately 632 feet from the northern edge of the plume. The groundwater use restriction area encompasses the portion of the plume moving to the northeast, as shown on **Figure 2**, which will be transmitted to the Harford County Health Department, City of Havre de Grace Planning and Zoning Department, and the POTW in early 2023 in accordance with the site's Institutional and Engineering Control Plan.

Six monitoring wells were identified for POC monitoring (MW-3, MW-12S, MW-12D, MW-13D, MW-19D1, and MW-20D1) during active operation of the groundwater stabilization system. Annual COC sampling results from 2022 are summarized below:

- At three POC locations (MW-12S, MW-12D, and MW-20D1), COC concentrations are less than their respective CAO goals.
- At on-site POC monitoring well MW-3, 1,2-DCA, methylene chloride, and VC were detected at concentrations exceeding their CAO goal of 5 μg/L (1,2-DCA and methylene chloride) and 2 μg/L (VC).
- At downgradient POC well MW-19D1, the concentration of 1,2-DCA exceeded the CAO goal of 5 μg/L in 2022 (52 μg/L), slightly higher than the 2021 result. 1,2-DCA concentrations at this location remained less than the CAO goal of 5 μg/L between 2014 and 2017. The current concentration of 1,2-DCA (52 μg/L) at MW-19D1 is less than the historical maximum value (390 μg/L in 2000), and concentrations generally have been stable since 2018, ranging from 26 to 52 μg/L. It is expected that concentrations of 1,2-DCA will attenuate (reduce) through time at this location. This is further supported by the significant reduction in COC concentrations at off-site monitoring well MW-27 (only TCE and VC were detected at concentrations greater than their respective CAO goals in 2022) since expansion of the groundwater stabilization system in 2015.
- At MW-3, methylene chloride (27 μg/L, duplicate concentration of 31 μg/L) was greater than its CAO goal of 5 μg/L. Historically, MW-3 was one of the more impacted wells on site and concentrations have decreased several orders of magnitude through the last 17 years.
- In general, concentrations of the other COCs have remained stable or decreased following implementation of the expanded groundwater stabilization system in January 2015. Exceptions include the periodic increases of VC concentrations at monitoring well MW-3 due to natural attenuation processes.
- The only COC widely detected in the off-site monitoring well network was 1,2-DCA. Since implementation of the PMP (Arcadis 2012b), the highest off-site concentration of 1,2-DCA has been observed at monitoring well MW-27 (12,000 μg/L). As presented in **Appendix H**, Figure H-16, 1,2-DCA concentrations at monitoring well MW-27 have decreased from 12,000 μg/L (December 2006) to 3 μg/L (September 2022).
- Concentrations of 1,2-DCA greater than 100 μg/L were observed at two monitoring wells (MW-6I and MW-28D). 1,2-DCA concentrations exhibit an overall declining trend at MW-28D even with a recent increase from

450 D μ g/L in 2020 to 1,600 μ g/L in 2022. 1,2-DCA concentrations exhibit an overall stable trend at MW-6I, with recent detections being lower than detections from 2016 through 2020.

Groundwater samples from select monitoring wells are analyzed for biogeochemical parameters and degradation products to assess the biodegradation potential of groundwater COCs and current groundwater redox conditions. Biogeochemical sample results from 2022 are summarized below:

- The biogeochemical data collected to date indicate that redox conditions range from mildly to strongly reducing.
- Wells MW-3, MW-14I, MW-16, MW-19D1, and MW-27 exhibited methane detections that were higher than background levels and ranged from 14 to 150 μg/L. Methane was also detected at downgradient monitoring well MW-20D1 (180 μg/L).
- Advanced degradation product, ethene, has been detected at significant concentrations (greater than 100 μg/L) in MW-27 from 2014 to 2022.

The presence of these compounds suggests that COCs are attenuating at wells MW-3, MW-14I, MW-16, MW-19D1, MW-20D1, and MW-27, and the natural attenuation processes are contributing to mass destruction.

Conservative fate and transport calculations were completed to estimate the distance downgradient that 1,2-DCA concentrations in groundwater reach levels less than the CAO (5 μ g/L). The results indicate that 1,2-DCA in well MW-19D1 will attenuate to concentrations less than the CAO before reaching the Chesapeake Bay at its closest point located approximately 632 feet downgradient of MW-19D1.

The groundwater stabilization system operated continuously, except for extraction well EW-02, with an overall uptime of 74 percent in 2022. A P-300 overload fault alarm shut down the EW-02 pump in March 2022. A new motor was ordered, and groundwater extraction should resume in January 2023. The most significant downtime occurred in December 2021 through February 2022 due to a pipe leak at the POTW facility. Repairs were completed on February 10, 2022, when corroded pipes were replaced and the system was returned to operational status. While biofouling of the well screens, pump motors, and subsurface piping network continue to hinder system performance, routine and proactive O&M activities conducted in 2022 optimized overall system performance, similar to 2021.

The observed water-level data indicate that under pumping conditions, the deep overburden zone is hydraulically captured across the entire width of the on-site impacted area. Moreover, the observation that COCs in wells downgradient of the northeastern site boundary continue to demonstrate decreasing or stable trends (i.e., MW-27, MW-18, MW-16, and MW-14) is further evidence that adequate hydraulic capture is occurring.

To maintain the operational capture zone of the groundwater stabilization system in 2023, an annual well rehabilitation and hydro-jetting event will be conducted in addition to routine pump cleaning throughout the year. Routine pipe cleaning will be conducted quarterly, or as needed based on well performance. Additionally, routine system inspections and timely leak repairs will allow for continued system operation. Effluent samples collected during routine system inspections will be used to optimize flow rate at the three extraction wells.

8 Path Forward

The following activities are planned for 2023:

- Continue operation of the groundwater stabilization system to maintain groundwater capture. The PMP
 (Arcadis 2012b) states that the groundwater stabilization system will operate for at least 15 years (2015
 through 2030). The eighth year of operation was performed in 2022.
- Perform annual extraction well rehabilitation to maintain well and pump performance.
- Resume groundwater extraction at EW-02.
- Collect samples for analysis of biogeochemical parameters (ethane, ethene, methane, sulfate, total and dissolved iron, and TOC) at MW-28D, the well with the highest COC concentrations currently.
- Utilize the software program KT3D_H2O Version 3.0 (Karanovic et al. 2009) to interpret groundwater elevation contours and estimate capture zones for the site extraction wells. KT3D_H2O Version 3.0 is a graphical user interface that combines various programs to generate gridded maps of groundwater-level elevations with corresponding estimated capture zones. The tools used in KT3D_H2O Version 3.0 combine geostatistical (kriging) and hydrological sciences to allow the user to support map-based hydrogeologic analyses without the use of numerical groundwater flow models. This software is cited in USEPA guidance (2008) and will provide for analysis of the extraction system operation using current data, rather than relying on historical step testing data or approximated well efficiencies to estimate groundwater elevations and influence near the extraction wells.

Following the collection of 10 years of performance monitoring data, an additional statistical trend analysis will be conducted in 2024. Results of the statistical analysis will be used to modify the monitoring program and assess long-term trends in response to continued implementation of the expanded system.

9 References

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Tables



		Top of Casing Ground Screened Inte		d Interval	val Screened Interval		Passive Sampler ²		September 13, 2022 ³		
Well ID ¹	On Site/ Off Site	Top of Casing Elevation (feet amsl)	Elevation (feet amsl)	Top (feet bgs)	Bottom (feet bgs)	Top (feet amsl)	Bottom (feet amsl)	Sampler Depth (feet bgs)	Sampler Elevation (feet amsl)	Depth to Groundwater (feet btic)	Groundwater Elevation (feet amsl)
Shallow Ove	erburden										
MW-4	On Site	46.4	46.95	5	15	41.95	31.95	12.0	35.0	3.96	42.44
MW-5	On Site	49.7	50.33	4.4	14.4	45.33	35.33	NS	NS	10.02	39.68
MW-6	On Site	50.93	51.33	3	16	48.33	35.33	NS	NS	11.71	39.22
MW-7	On Site	44.67	44.78	2.9	17.9	41.78	26.78	NS	NS	6.71	37.96
MW-8S	On Site	41.02	41.6	9	19	32.6	22.6	16.0	25.6	4.91	36.11
MW-9S	On Site	42.02	42.08	9.9	19.9	32.08	22.08	17.5	24.6	10.29	31.73
MW-10S	On Site	44.79	45.04	10	20	35.04	25.04	11.0	34.0	5.65	39.14
MW-11S	On Site	44.28	44.51	9.8	19.8	34.51	24.51	NS	NS	6.06	38.22
MW-12S	On Site	49.62	49.71	8	18	41.71	31.71	15.0	34.7	7.90	41.72
Shallow and	Intermediate	Overburden									
MW-1A	On Site	46.8	45.2	3.6	21.6	43.2	25.2	NS	NS	8.53	38.26
MW-2	On Site	47.4	44.8	4.6	23.1	42.8	24.3	NS	NS	3.44	43.97
Intermediate	Overburden										
MW-5D	On Site	48.55	48.93	14.2	24.2	34.33	24.33	NS	NS	9.20	39.35
MW-6I	On Site	50.2	50.55	21.65	27.65	28.55	22.55	26.5	24.1	12.81	37.39
MW-12D	On Site	49.41	49.7	18	28	31.7	21.7	26.5	23.2	14.81	34.60
MW-13S	On Site	50.81	NA	10	20	41.01	31.01	NS	NS	11.19	39.62
MW-13D	On Site	50.79	51	22	32	29	19	29.5	21.5	12.26	38.53
MW-14I	Off Site	35.8	35.98	16	26	19.98	9.98	23.0	13.0	14.10	21.70
MW-15I	Off Site	34.99	35.36	12.6	22.6	22.36	12.36	NS	NS	14.31	20.68
MW-22S	On Site	44.13	44.43	7	17	37.43	27.43	NS	NS	Dry	N/A
MW-24	On Site	48.71	49.14	19.75	27.75	29.39	21.39	NS	NS	10.48	38.23
MW-25I	On Site	49.54	49.94	20	30	29.94	19.94	28.5	21.4	14.94	34.60
Intermediate	and Deep O	verburden									
MW-28D	On Site	49.14	49.41	27.5	42.5	21.91	6.91	30.0	19.4	16.33	32.81
Deep Overbu	urden										
EW-01 ⁴	On Site	46.14	49.29	40	45	9.29	4.29	NS	NS	20.46	25.68
EW-02 ⁴	On Site	41.9	44.9	24	32	20.9	12.9	NS	NS	11.53	30.37
MW-10D ⁴	On Site	45.16	45.82	29.2	39.2	16.9	6.9	NS	NS	15.94	29.22
MW-3	On Site	45.39	44.99	34.5	40	10.49	4.99	37.0	8.0	13.13	32.26
MW-6D	On Site	50.34	50.65	31.3	41.3	19.35	9.35	NS	NS	17.61	32.73
MW-8D	On Site	41.19	41.36	30	40	11.36	1.36	35.0	6.4	9.56	31.63
MW-9D	On Site	41.9	42.07	22.8	33.5	19.07	8.36	NS	NS	11.01	30.89
MW-11D ⁵	On Site	44.53	44.71	29.8	39.8	14.71	4.71	NS	NS	14.84	29.69
MW-14	Off Site	36.43	36.83	26	36	10.83	0.83	35.0	1.8	11.40	25.03
MW-15	Off Site	35.32	35.67	22	32	13.67	3.67	NS	NS	13.38	21.94
MW-16 ⁵	Off Site	38.17	38.19	27	37	11.19	1.19	30.0	8.2	12.52	25.65
MW-17	Off Site	39.83	40.12	5.3	10.3	34.52	29.52	NS	NS	6.30	33.53
MW-18	Off Site	38.37	38.67	22.5	32.5	16.17	6.17	24 31	14.67 7.67	9.50	28.87
MW-19D1	Off Site	29.26	29.53	34	44	-4.47	-14.47	39.0	-9.5	24.26	5.00
MW-19D2 ⁶	Off Site	29.21	25.94	64	74	-38.06	-48.06	NS	NS	32.03	-2.82
MW-20D1 ^{6,7}	Off Site	25.66	25.87	37	47	-11.13	-21.13	40.0	-14.1	21.21	4.45
MW-20D2	Off Site	25.64	25.94	85	95	-59.06	-69.06	NS	NS	21.89	3.75
MW-21	Off Site	33.84	34.13	36	46	-1.87	-11.87	NS	NS	30.20	3.64
MW-22D	Off Site	44.32	44.51	27.5	37.5	17.01	7.01	32.0	12.5	11.77	32.55
MW-23	Off Site	45.96	46.3	39.4	49.4	6.9	-3.1	40 47	6.3	35.66	10.30
MW-25	On Site	49.42	49.9	30	40	19.9	9.9	NS	NS	15.49	33.93
MW-26	On Site	47.24	47.56	29.3	39.3	18.26	8.26	NS	NS	12.50	34.74
MW-27 ⁵	Off Site	43.07	43.27	23.95	33.95	19.12	9.12	41.5	1.8	11.42	31.65
Bedrock											
MWBR-1	On Site	45.68	45.93	43.8	53.8	1.93	-8.07	NS	NS	13.49	32.19
MWBR-2	On Site	45.27	45.51	57.8	77.8	-12.49	-32.49	NS	NS	15.63	29.64
MWBR-3	On Site	42.39	42.64	79.8	99.8	-37.36	-57.36	NS	NS	10.78	31.61
MWBR-4	On Site	46.01	46.28	92.7	116.7	-46.72	-70.72	NS	NS	14.41	31.60

Notes:

¹ Rows highlighted yellow indicate a monitoring location that is sampled annually as part of the Performance Monitoring Plan (Arcadis 2012). MW-6 and MW-15 were removed from the sampling program in 2020.

- ² Groundwater samples were collected using in-situ HydraSleeve™ samplers. Deployment depths are measured from the ground surface to the midpoint of the samplers.
- ³ Gauging was conducted during a period of consistent system operation between September 13 and 15, 2022.
- ⁴ Active extraction wells include EW-01 and MW-10D. EW-02 was inactive during this gauging event. Extraction well groundwater elevations were corrected for well losses and reflected results are described in Appendix F and shown on supporting figures.
- ⁵ Based on the refinement of the conceptual site model presented in the 2017 Annual Groundwater Performance Monitoring Report (Arcadis 2018) and following regulatory concurrence, MW-11D, MW-16, and MW-27 were reclassified from intermediate overburden wells to deep overburden wells in 2018.
- ⁶ Depth to groundwater is considered anomalous and not used in groundwater contouring.
- ⁷ Value changed from 31.21 to 21.21, likely error in field measurement.

Acronyms and Abbreviations:

amsl = above mean sea level

bgs = below ground surface

btic = below top of inner casing N/A = not applicable/no information

NS = not sampled

References:

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Well ID	Purpose	Monitoring Parameters ^{1,2,3}			
Shallow Overburden Zone					
MW-4	Plume Evaluation	COCs			
MW-8S	Plume Evaluation	COCs			
MW-12S	Point of Compliance - Site Boundary	COCs			
Intermediate Overburden Zo	one				
MW-6I	Plume Evaluation	COCs			
MW-12D	Point of Compliance - Site Boundary	COCs			
MW-13D	Point of Compliance - Site Boundary	COCs			
MW-14I	Plume Evaluation	COCs, MNA			
MW-25I	IW-25I Plume Evaluation				
Intermediate and Deep Over	rburden Zone				
MW-28D	Plume Evaluation	COCs			
Deep Overburden Zone					
MW-3	Point of Compliance - Site Boundary	COCs, MNA			
MW-8D	Plume Evaluation	COCs			
MW-14	Plume Evaluation	COCs			
MW-16 ⁴	Plume Evaluation	COCs, MNA			
MW-18	Plume Evaluation	COCs, MNA			
MW-19D1	Point of Compliance - Downgradient Edge	COCs, MNA			
MW-20D1	Point of Compliance - Downgradient Edge	COCs, MNA			
MW-22D	Plume Evaluation	COCs			
MW-23	Plume Evaluation	COCs, MNA			
MW-27 ⁴	Plume Evaluation	COCs, MNA			

Notes:

References:

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Arcadis. 2018. 2017 Annual Groundwater Performance Monitoring Report. Cytec Solvay Group. Havre de Grace, Maryland (USEPA ID #MDD003075942). February.

¹ In addition to the parameters identified in the table, groundwater elevation measurements and field parameters (i.e., pH, specific conductivity, oxidation-reduction potential, temperature, and dissolved oxygen) are also collected during each performance monitoring event.

² Constituents of concern (COCs) consist of the following volatile organic compounds: chloroform, 1,2-dichloroethane, methylene chloride, trichloroethene, 1,1,2-trichloroethane, and vinyl chloride. In addition to the COCs, groundwater samples are also analyzed for the degradation products: chloroethane and cis-1,2-dichloroethene.

³ Monitored natural attenuation (MNA) parameters consist of total organic carbon, sulfate, total/dissolved iron, and dissolved gases (methane, ethane, and ethene).

⁴ Based on the refinement of the conceptual site model presented in the 2017 Annual Groundwater Performance Monitoring Report (Arcadis 2018) and following regulatory concurrence, MW-11D, MW-16, and MW-27 were reclassified from intermediate overburden wells to deep overburden wells in 2018. It should be noted that MW-11D is not sampled as part of the Performance Monitoring Plan (Arcadis 2012) monitoring well





Constituent of Concern	Numerical CAO Goal ¹ (μg/L)					
1,1,2-Trichloroethane	5					
1,2-Dichloroethane	5					
Chloroform	0.19 ^{2,3}					
Methylene Chloride	5					
Tetrachloroethene ⁴	5					
Trichloroethene	5					
Vinyl Chloride	2					
Carbon Disulfide ⁴	1,000					

Notes:

¹ Numerical corrective action objective (CAO) goals are equivalent to maximum contaminant levels (MCLs) set by the United States Environmental Protection Agency (USEPA).

 $^{^{2}\,\}mbox{The}$ established numerical CAO goal is equivalent to USEPA risk-based screening levels for tapwater.

 $^{^3}$ Chloroform is classified as a trihalomethane; the MCL for trihalomethane is 80 micrograms per liter (μ g/L).

⁴ PCE and carbon disulfide were removed from the monitoring program in 2016.





Sample Date	1,2-Dichloroethane (μg/L)	Methylene Chloride (µg/L)
Extraction Well EW-01		
1/9/2014	3,700	ND
12/30/2014	1,900	33
3/12/2018	1,600	78
10/11/2018	580	ND
1/31/2019	940	ND ND
<u>4/15/2019</u> <u>9/5/2019</u>	900	ND ND
12/6/2019	540 E	ND ND
1/21/2020	790	ND ND
5/18/2020	270	ND
7/28/2020	550	ND F2
10/29/2020	240	ND
3/9/2021	820	ND
8/26/2021	1,100 D	500 D
9/15/2021	83 HD	ND
11/2/2021	380 D	10
1/12/2022	350 D	56 D
5/10/2022	670 D	ND
7/15/2022	790 D	ND
10/11/2022	400 D	ND
Extraction Well EW-02	0.000	450,000
1/9/2014	250,000	450,000
12/30/2014 5/15/2015	79,000	260,000
7/13/2015	51,000 150,000	110,000 370,000
10/7/2015	43,000	82,000
1/19/2016	29,000	59,000
4/5/2016	21,000	39,000
6/30/2016	19,000	25,000
10/4/2016	33,000	76,000
2/10/2017	29,000	55,000
5/5/2017	13,000	22,000
8/4/2017	NS	NS
10/6/2017	43,000	110,000
3/12/2018	15,000	23,000
10/11/2018	18,000	49,000
1/31/2019	12,000	22,000
4/15/2019	13,000	12,000
<u>9/5/2019</u> 1/21/2020	21,000 19,000	38,000 34,000
5/18/2020	4,900	3,000
7/28/2020	NS	NS
10/29/2020	2,900	710
3/9/2021	9,000	13,000
8/26/2021	17,000 D	10,000 HD
9/15/2021	1,800 HD	3,200 HD
11/2/2021	4,700 D	17,000 D
1/12/2022 ¹	47,000 D	140,000 D
Extraction Well MW-10D		AV/4
1/9/2014	NA	N/A
12/30/2014	2	ND
5/15/2015	160	14
7/13/2015 10/7/2015	110 38	ND ND
1/19/2016	58	1.1 J
4/5/2016	19	ND
6/30/2016	12	ND
10/4/2016	62	ND ND
2/10/2017	23	ND ND
5/5/2017	8.9	ND
8/4/2017	43	ND
10/6/2017	3.6	ND
3/12/2018	11	ND
10/11/2018	5.7	ND
1/31/2019	1.5	ND





Sample Date	1,2-Dichloroethane (μg/L)	Methylene Chloride (μg/L)
4/15/2019	6.6	ND
9/5/2019	1.2	ND ND
12/6/2019	1.9	ND ND
1/21/2020	6.6	ND ND
5/18/2020	3.7	ND ND
7/28/2020	4.6	ND ND
10/29/2020	3.5	ND ND
3/9/2021	2.4	ND ND
8/26/2021	83	110
9/15/2021	1 HD	ND
11/2/2021	290 D	59 D
1/12/2022	2.1	ND
5/10/2022	ND	ND ND
7/15/2022	0.73 J	ND ND
10/11/2022		ND ND
Effluent	1.8	שוא
12/30/2014	16,000	53,000
5/15/2015	3,700	6,200
7/13/2015 10/7/2015	5,500	10,000
1/19/2016	2,800 4,200	4,600
4/5/2016		7,400
	1,300	1,200
6/30/2016 10/4/2016	1,100	910
	1,100	1,800
2/10/2017	7,500	14,000
5/5/2017	1,500	2,100 ND
8/4/2017	330	
10/6/2017	15,000	34,000
3/12/2018	3,600	5,200 960
10/11/2018	2,700	
1/31/2019	1,200	1,400
4/15/2019	710	500
9/5/2019	7,600	13,000
10/10/2019 12/6/2019	240 57	ND ND
1/21/2020	4,600	9,000
5/18/2020	ND	ND ND
7/28/2020	37 270 D	ND 220 D
10/12/2020	370 D	230 D
3/9/2021	1,700	2,700
8/26/2021	4,000 D	15,000 D
9/15/2021	600 HD	ND
11/2/2021	5,800 F	19,000 D
1/12/2022	13,000 D	37,000 D
5/10/2022	140 D	ND ND
7/15/2022	160 D	ND ND
10/11/2022	60 D	ND

Notes

System samples are collected while the system is running.

Acronyms and Abbreviations:

 μ g/L = microgram per liter

N/A = not applicable/no information

ND = nondetect

NS = not sampled

Qualifiers:

D = quantified in a secondary dilution (lab qualifier)

E = result exceeds calibration range

F/F2 = matrix spike/matrix spike duplicate relative percent difference exceeds control limits

H = sample was prepped or analyzed beyond the specified holding time

J = estimated value

¹ System was shut down for 3 weeks prior to January sampling, may lead to lack of dilution due to non-pumping.





Date	Daily Total Flow (Gallons)	Operational Days	Summary of System Maintenance
December 2021	82,766	8	On 12/9/21, Arcadis was on site to conduct routine operation and maintenance (O&M), including replacing a faulty pH probe and water-level transducer at EW-02. High differential flow alarms caused the system to remain shutdown from 12/21/21 to 1/11/22.
January 2022	55,402	5	On 1/11/22, Arcadis was on site for quarterly system sampling and to troubleshoot system alarms. On 1/20/22, the Publicly Owned Treatment Works (POTW) staff notified Cytec of a potential leak at the POTW pipe, prior to the system water entering the POTW digester. The system remained shut down until 2/1/22, when Arcadis replaced the corroded pipe at the POTW.
February 2022	142,433	15	On 2/10/22, an additional leak was noted at the POTW, and the system was shut down until Arcadis could replace the leaking parts. On 2/23/22, Arcadis was on site to conduct O&M, including replacing a faulty pH probe and cleaning the EW-02 flow meter. Arcadis also replaced the C-more remote access panel with an upgraded model.
March 2022	285,664	29	On 3/15/22, a P-300 overload fault alarm was received. This alarm was triggered as a result of a failing motor on the EW-02 pump. Since this alarm was received, pumping at EW-02 remains shutdown until a new motor can be installed by staff with proper electrical training.
April 2022	247,191	25	On 4/12/22, Arcadis was on site to conduct routine annual O&M, including pipe jetting and well rehabilitation.
May 2022	277,962	30	Multiple E-stop alarms and one erroneous leak alarm were received in May.
June 2022	280,172	27	On 6/27/22, a pipe leak alarm was received. Arcadis staff responded to the alarm on 7/15/22 to repair the leak at MW-10D.
July 2022	146,055	15	On 7/7/22, an EW-01 transducer failure alarm was received. The alarm was disabled until Arcadis could inspect the transducer.
August 2022	265,693	25	On 8/25/22, Arcadis responded to the EW-01 transducer failure alarm received on 7/7/22. The transducer needs to be replaced by staff with proper electrical training.
September 2022	319,666	30	One E-stop alarm was received in September.
October 2022	319,207	31	Multiple E-stop alarms were received in October.
November 2022	277,821	27	One E-stop alarm was received in November.





	Screened Int	Location ID: Sample Date: terval (feet amsl):	MW-3 09/15/22 10.49 to 4.99	MW-4 09/14/22 41.95 to 31.95	MW-6I 09/14/22 28.55 to 22.55	MW-8D 09/14/22 11.36 to 1.36	MW-8S 09/14/22 31.7 to 21.7	MW-12D 09/14/22 31.7 to 21.7	MW-12S 09/14/22 41.71 to 31.71	MW-13D 09/14/22 29 to 19	MW-14 09/14/22 10.83 to 0.83	MW-14I 09/15/22 19.98 to 9.98
Passive	Sampler Elev	ation (feet amsl):	7.99	34.95	24.05	25.6	23.2	23.2	34.71	21.5	1.83	12.98
COCs	Unit	CAO Goal ¹										
1,1,2-Trichloroethane	μg/L	5	10 U [5.0 U]	1.0 U	5.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	μg/L	5	34 [38]	1.0 U	510 D	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	22	3.0	5.3
Chloroform	μg/L	0.19	10 U [5.0 U]	1.0 U	5.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	μg/L	5	27 [31]	1.0 U	5.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	μg/L	5	10 U [5.0 U]	1.0 U	9.7	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	3.0	1.0 U	1.0 U
Vinyl Chloride	μg/L	2	91 [100]	1.0 U	5.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Water Quality Parameters ²												
Dissolved Oxygen	mg/L		8.90	6.16	6.40	3.13	4.95	7.26	6.58	3.13	2.80	5.39
Oxidation-Reduction Potential	mV		61.9	327.09	75.80	11.10	12.1	69.1	35.0	11.1	138.6	159.7
Specific Conductivity	μS/cm		0.228	0.943	0.535	0.008	0.651	0.732	1.165	0.008	0.128	0.277
Temperature	°C		18.34	20.99	20.20	24.72	21.19	18.03	20.61	24.72	18.41	19.50
рН	S.U.		9.21	5.90	5.33	5.75	5.91	6.09	6.11	5.75	5.90	5.59
Monitored Natural Attenuatio	n Parameters	;		-				•	•			
Chloroethane	μg/L		10 U [5.0 U]	1.0 U	5.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	μg/L		10 U [5.0 U]	1.0 U	3.7 J	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethane	μg/L		0.93 J [1.0]	NA	NA	NA	NA	NA	NA	NA	NA	0.68 J
Ethene	μg/L		10 [11]	NA	NA	NA	NA	NA	NA	NA	NA	0.42 J
Methane	μg/L		14 [18]	NA	NA	NA	NA	NA	NA	NA	NA	100
Sulfate	mg/L		2.1 [2.1]	NA	NA	NA	NA	NA	NA	NA	NA	54
Iron, Total	μg/L		1,900 J [4,800 J]	NA	NA	NA	NA	NA	NA	NA	NA	20,000
Iron, Dissolved	μg/L		50 U [50 U]	NA	NA	NA	NA	NA	NA	NA	NA	50 U
Total Organic Carbon	mg/L		0.94 J [0.91 J]	NA	NA	NA	NA	NA	NA	NA	NA	1.9





		Location ID: Sample Date:	MW-16 09/15/22	MW-18 (24) 09/14/22	MW-18 (31) 09/15/22	MW-19D1 09/15/22	MW-20D1 09/15/22	MW-22D 09/14/22	MW-23 (40) 09/15/22	MW-23 (47) 09/15/22	MW-25I 09/14/22	MW-27 09/15/22	MW-28D 09/14/22
		terval (feet amsl):	11.19 to 1.19	16.17 to 6.17	16.17 to 6.17	-4.47 to -14.47		17.01 to 7.01	6.9 to -3.1	6.9 to -3.1	29.94 to 19.94	19.12 to 9.12	21.91 to 6.91
		ation (feet amsl):	8.19	7.67	14.67	-9.47	-14.13	12.51	6.3	-0.7	21.44	1.77	19.41
COCs	Unit	CAO Goal ¹											
1,1,2-Trichloroethane	μg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.61 J	2.2	50 U
1,2-Dichloroethane	μg/L	5	1.0 U	1.0 U	1.0	52 D	1.0 U	0.65 J	11	9.5	2.0	3.0	1,600
Chloroform	μg/L	0.19	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.76 J	1.0 U	50 U
Methylene Chloride	μg/L	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	50 U
Trichloroethene	μg/L	5	3.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	6.1	5.9	50 U
Vinyl Chloride	μg/L	2	4.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.7	50 U
Water Quality Parameters ²		-											
Dissolved Oxygen	mg/L		2.10	5.75	5.75	6.47	5.78	9.44	2.50	2.50	6.66	5.73	6.32
Oxidation-Reduction Potential	mV		-91.1	120.2	120.2	93.4	102.3	129.8	100.2	100.2	143.0	142.0	65.6
Specific Conductivity	μS/cm		0.222	0.336	0.336	0.179	0.133	0.21	0.233	0.233	0.553	0.167	0.484
Temperature	°C		15.54	19.87	19.87	15.42	15.13	17.64	15.23	15.23	17.99	21.03	17.84
pH	S.U.		7.76	6.96	6.96	5.83	5.79	5.64	5.21	5.21	5.07	6.54	5.79
Monitored Natural Attenuat	on Parameters	5											
Chloroethane	μg/L		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0	3.0	1.0 U	5.4	50 U
cis-1,2-Dichloroethene	μg/L		6.7	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.86 J	0.89 J	1.0 U	4.5	50 U
Ethane	μg/L		8.1	1.0 U	1.0 U	3.8	1.0 U	NA	0.59 J	1.0	NA	0.85 J	NA
Ethene	μg/L		0.60 J	1.0 U	1.0 U	1.0 U	1.0 U	NA	0.30 J	1.0 U	NA	730	NA
Methane	μg/L		57	5.0 U	4.9 J	150	180	NA	11	15	NA	78	NA
Sulfate	mg/L		6.8	14 J	14	29	17	NA	57	59	NA	2.3	NA
Iron, Total	μg/L		9,900	35,000	16,000	22,000	36,000	NA	10,000	12,000	NA	22,000	NA
Iron, Dissolved	μg/L		50 U	33 J	63	50 U	50 U	NA	50 U	47 J	NA	530	NA
Total Organic Carbon	mg/L		1.3	4.9	4.3	1.0	0.99 J	NA	0.96 J	0.92 J	NA	0.68 J	NA

Table 6 Groundwater Analytical Results 2022 Annual Groundwater Performance Monitoring Report 1300 Revolution Street Havre de Grace, Maryland



Notes:

¹ Values exceeding laboratory reporting limits are bolded. Values exceeding the numerical CAO goals are highlighted in gray.

² Water quality parameters are measured in the field during retrieval of each sampling device.

Acronyms and Abbreviations:

°C = degree Celsius

--- = not applicable

[] = duplicate sample result

μg/L = microgram per liter

μS/cm = microSiemen per centimeter

amsl = above mean sea level

CAO = corrective action objective

COC = constituent of concern

mg/L = milligram per liter

mV = millivolt

NA = not analyzed or measured

S.U. = standard unit

Qualifiers:

D = quantified in a secondary dilution (lab qualifier)

J = indicates an estimated concentration

U = indicates the analyte was analyzed but not detected greater than the detection limit; the associated value is the compound quantitation limit

Table 7 Summary of Percent Change from Historical Maximum Concentrations – Intermediate and Deep Monitoring Wells 2022 Annual Groundwater Performance Monitoring Report 1300 Revolution Street Havre de Grace, Maryland



			-DCA Concentrat (μg/L)	Percent Change	Percent Change		
Monitoring Well	Location/ Designation	Historical Maximum ²	Prior to Operation of the Expanded System ² (11/20/14)	Annual PMP Monitoring 2022 Results ² (09/14/22)	from Historical Maximum Concentration to 2022	Since Operation of the Expanded System to 2022	
Intermediate Over	burden						
MW-12D ¹	On site, POC	8,400 (12/15/98)	< 1 U	< 1 U	-100%	0%	
MW-13D	On site, POC	12,000 (4/13/99)	130	22	-100%	-83%	
MW-6I	On site	9,000 (12/7/06)	1,700	510 D	-94%	-70%	
MW-25I	On site	170 (1/3/08)	56	2	-99%	-96%	
MW-14I	Off site	220 (1/3/08)	23	5.3	-98%	-77%	
Deep Overburden							
MW-28D	On site	5,700 (5/2/11)	3,500	1,600	-72%	-54%	
MW-3	On site, POC	43,000 (5/28/96)	660	34	-100%	-95%	
MW-22D ¹	Off site	82 (9/17/02)	< 1 U	0.65 J	-99%	30%	
MW-8D ¹	Off site	2,800 (5/28/96)	< 1 U	< 1 U	-100%	0%	
MW-18 ³	Off site	4,800 (6/8/06)	100	<1 U	-100%	-99%	
IVIVV-18°	Oil site	4,800 (6/8/06)	270	1	-100%	-99%	
MW-14	Off site	4,000 (10/22/97)	24	3	-100%	-88%	
MW-16	Off site	11,000 (4/13/99)	160	<1 U	-100%	-100%	
MW-27	Off site	12,000 (12/7/06)	6,600	3	-100%	-100%	
MW-23 ³	Off site	020 (11/20/01)	94	11	000/	000/	
IVIVV-23	Oil site	920 (11/20/01)	56	9.5	-99%	-88%	
MW-19D1	Off site, POC	390 (12/19/01)	3	52 D	-87%	1633%	
MW-20D1 ¹	Off site, POC	5.4 (3/23/05)	1.1	<1 U	-91%	-55%	

Notes:

Acronyms and Abbreviations:

μg/L = microgram per liter

< = less than

% = percent

1,2-DCA = 1,2-dichloroethane

POC = point of compliance

PMP = Performance Monitoring Plan

Qualifiers:

D = quantified in a secondary dilution (lab qualifier)

J = indicates an estimated concentration

U = indicates the analyte was analyzed but not detected greater than the detection limit; the associated value is the compound quantitation limit

¹Monitoring well locations highlighted in green exhibited concentrations of 1,2-DCA less than the numerical corrective action objective (CAO) goal of 5 μg/L prior to operation of the expanded system in November 2014 as well as in September 2022.

²For evaluation purposes, values detected less than laboratory reporting limits were assumed to be equal to half the reporting limit.

³Sampling at two discrete depths within the screened interval at MW-18 and MW-23 began in 2008. The maximum result collected from the center of the screened interval is used for evaluation purposes.

Figures

Grace neignts

LEGEND:

CYTEC PROPERTY BOUNDARY

- SHALLOW OVERBURDEN ZONE MONITORING WELL
- INTERMEDIATE OVERBURDEN ZONE MONITORING WELL
- DEEP OVERBURDEN ZONE MONITORING WELL
- BEDROCK ZONE MONITORING WELL
- ▲ EXTRACTION WELL
- WELL SCREENED IN BOTH INTERMEDIATE AND DEEP **OVERBURDEN ZONES**
- WELL SCREENED IN BOTH SHALLOW AND INTERMEDIATE OVERBURDEN ZONES
- GROUNDWATER USE RESTRICTION AREA
- APPROXIMATE EXTENT OF IMPACTED GROUNDWATER

- BASEMAP INFORMATION OBTAINED FROM MAP TITLED GROUND-WATER SURFACE ELEVATION [FEET], AUGUST 12, 1992, PREPARED BY GROUNDWATER TECHNOLOGY, 10610 IRON BRIDGE RD., JESSUP, MD. 20794, PROJECT No. 01322-5479 FOR AMERICAN CYANAMID COMPANY, DATED OCT. 5, 1992.
- BASED ON THE REFINEMENT OF THE CONCEPTUAL SITE MODEL PRESENTED IN THE 2017 ANNUAL MONITORING REPORT AND FOLLOWING REGULATORY CONCURRENCE, MW-11D, MW-16, AND MW-27 WERE RECLASSIFIED FROM INTERMEDIATE OVERBURDEN WELLS TO DEEP OVERBURDEN WELLS IN 2018.
- MONITORING WELLS SAMPLED IN SEPTEMBER 2022 AND IN ACCORDANCE WITH THE PERFORMANCE MONITORING PLAN ARE HIGHLIGHTED IN YELLOW. ALL MONITORING WELLS SHOWN WERE GAUGED IN SEPTEMBER 2022.
- 4. DDC DENSITY DRIVEN CONVECTION.

APPROXIMATE SCALE: 1 in. = 400 ft.

CYTEC SOLVAY GROUP HAVRE DE GRACE, MARYLAND 2022 ANNUAL GROUNDWATER PERFORMANCE MONITORING REPORT

SITE PLAN

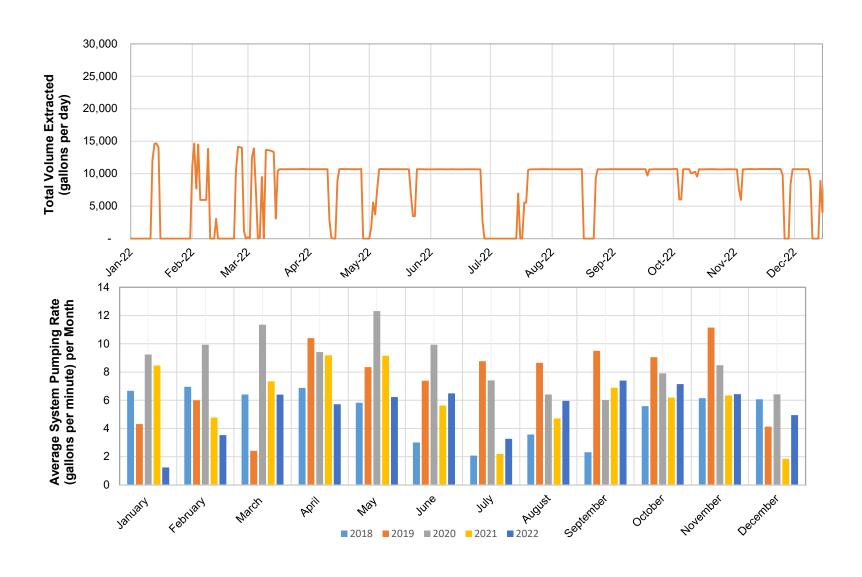


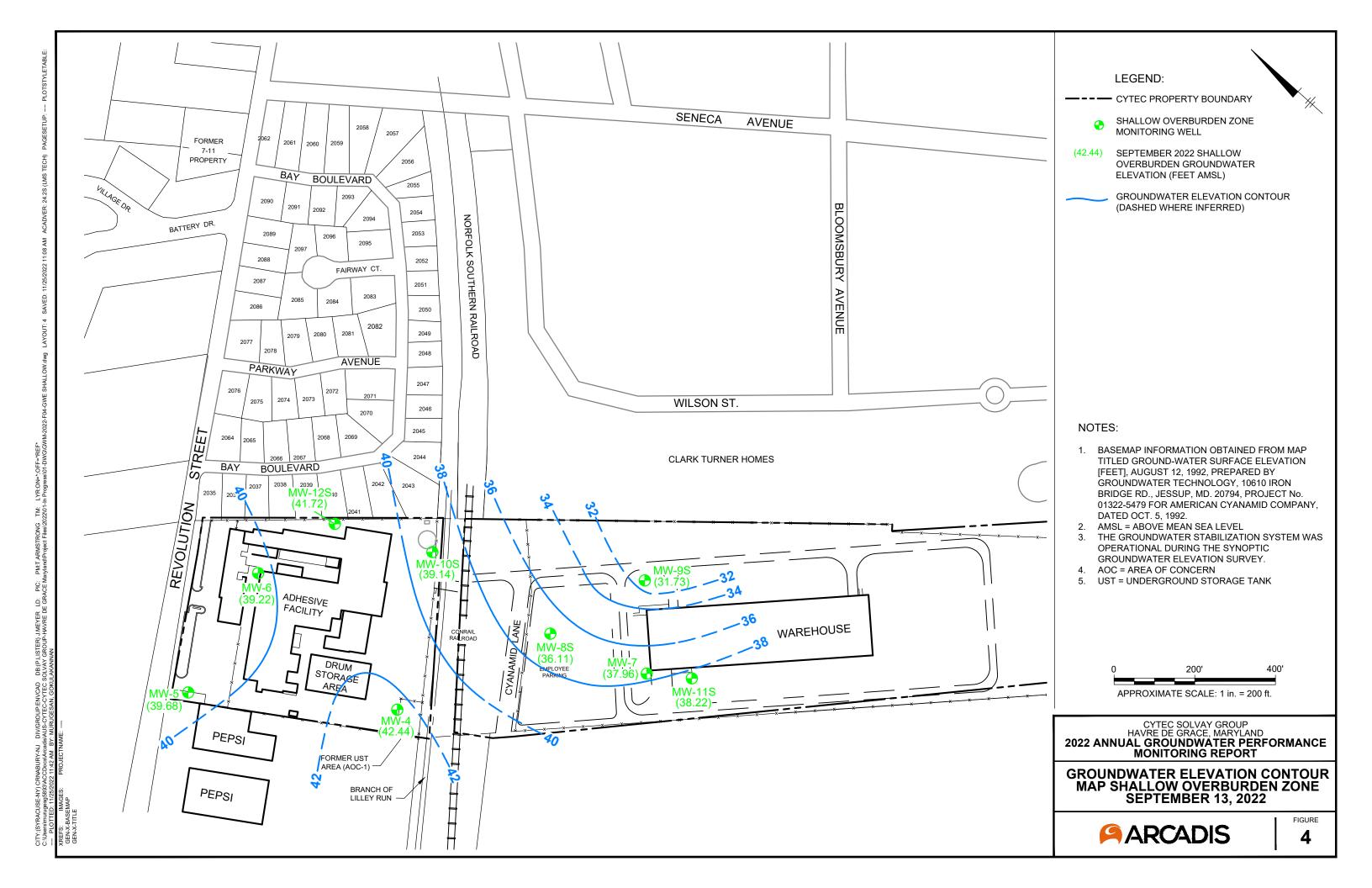
FIGURE

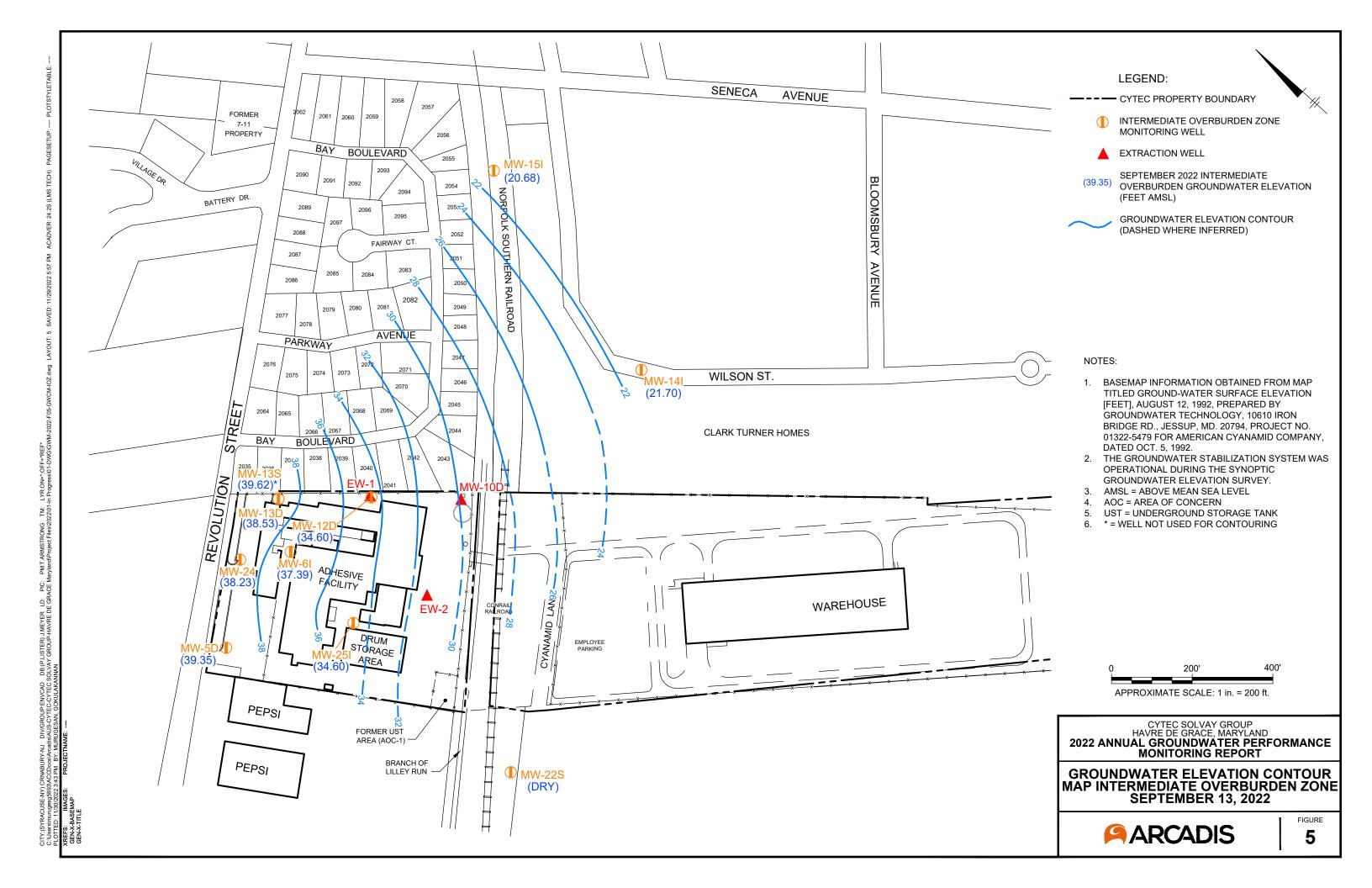
Figure 3
Summary of 2022 Pumping Volumes and Rates

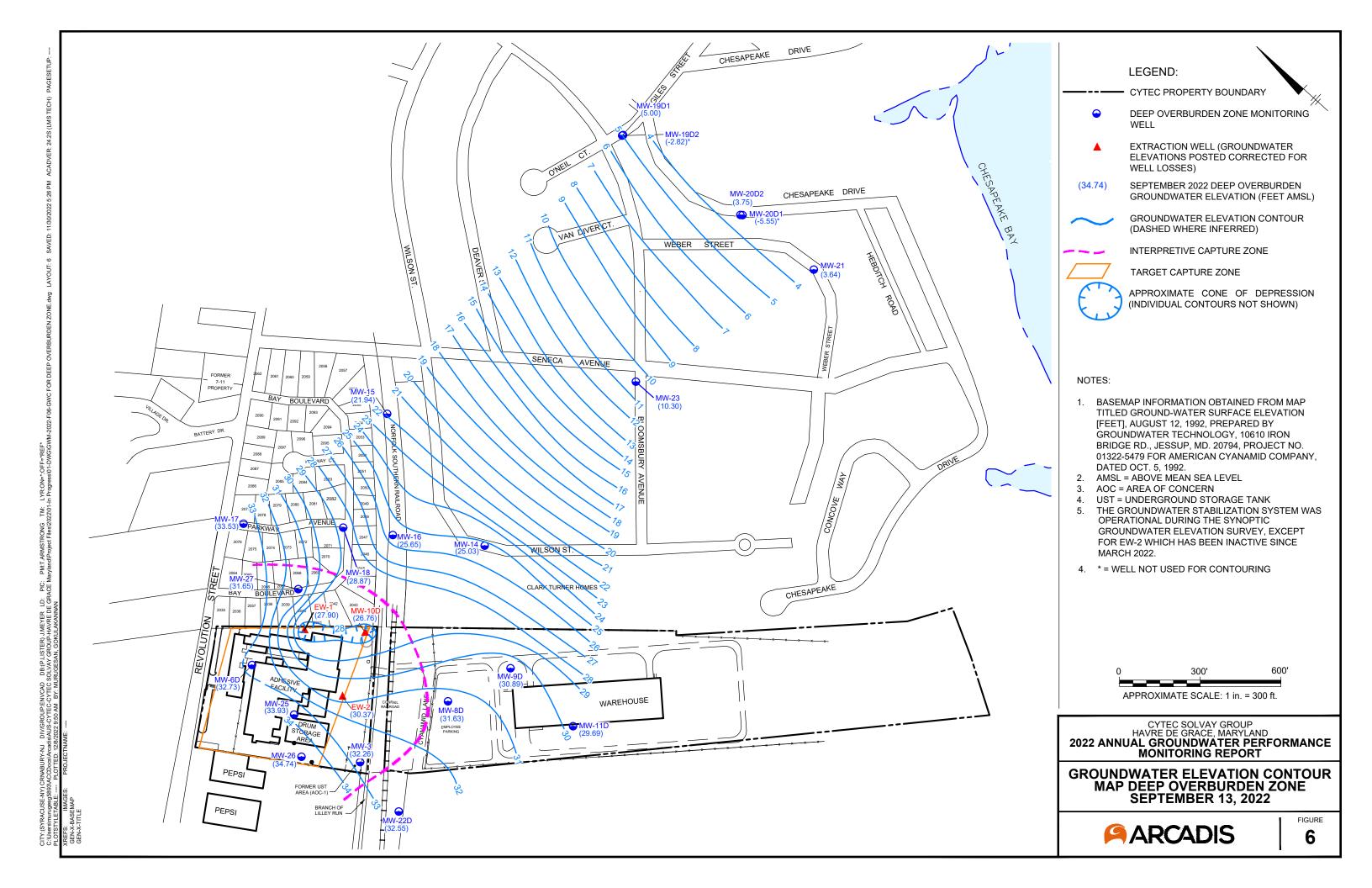


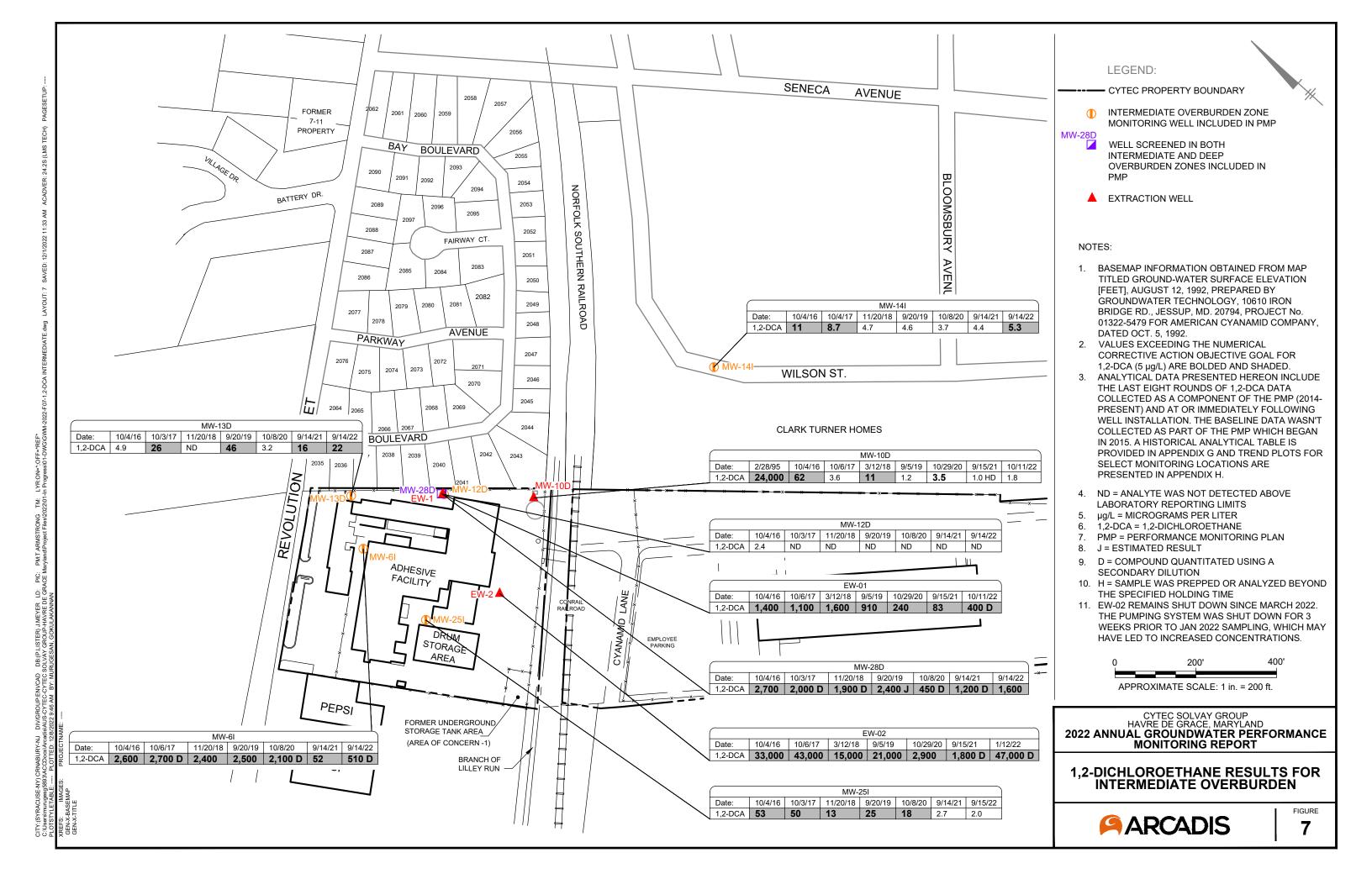
Cytec Solvay Group Havre de Grace, Maryland 2022 Annual Groundwater Performance Monitoring Report











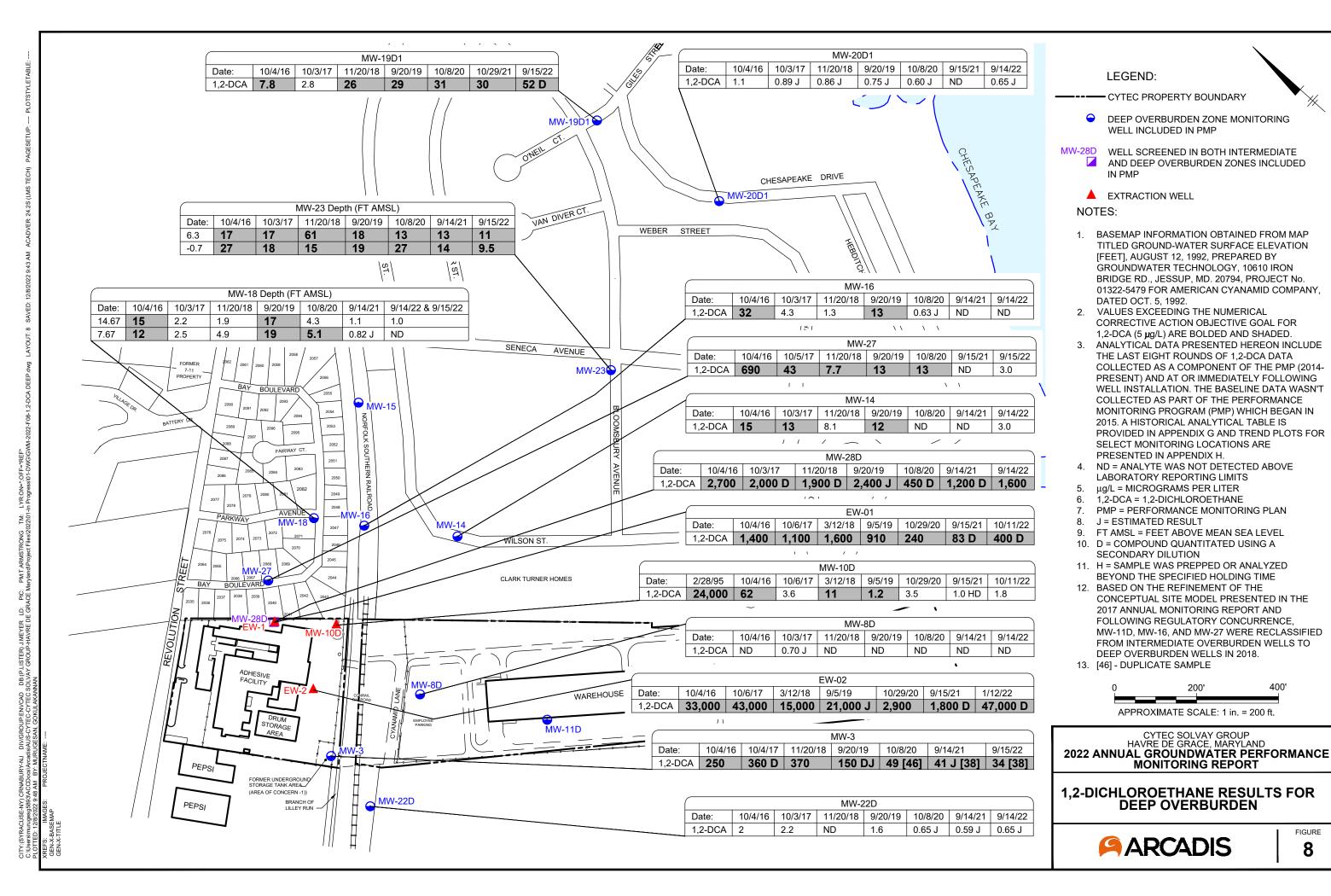
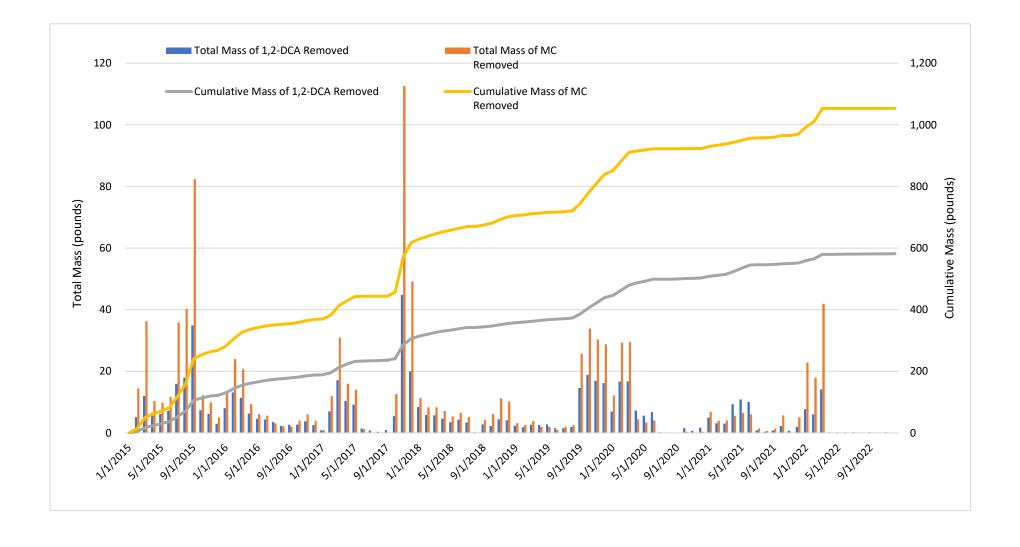
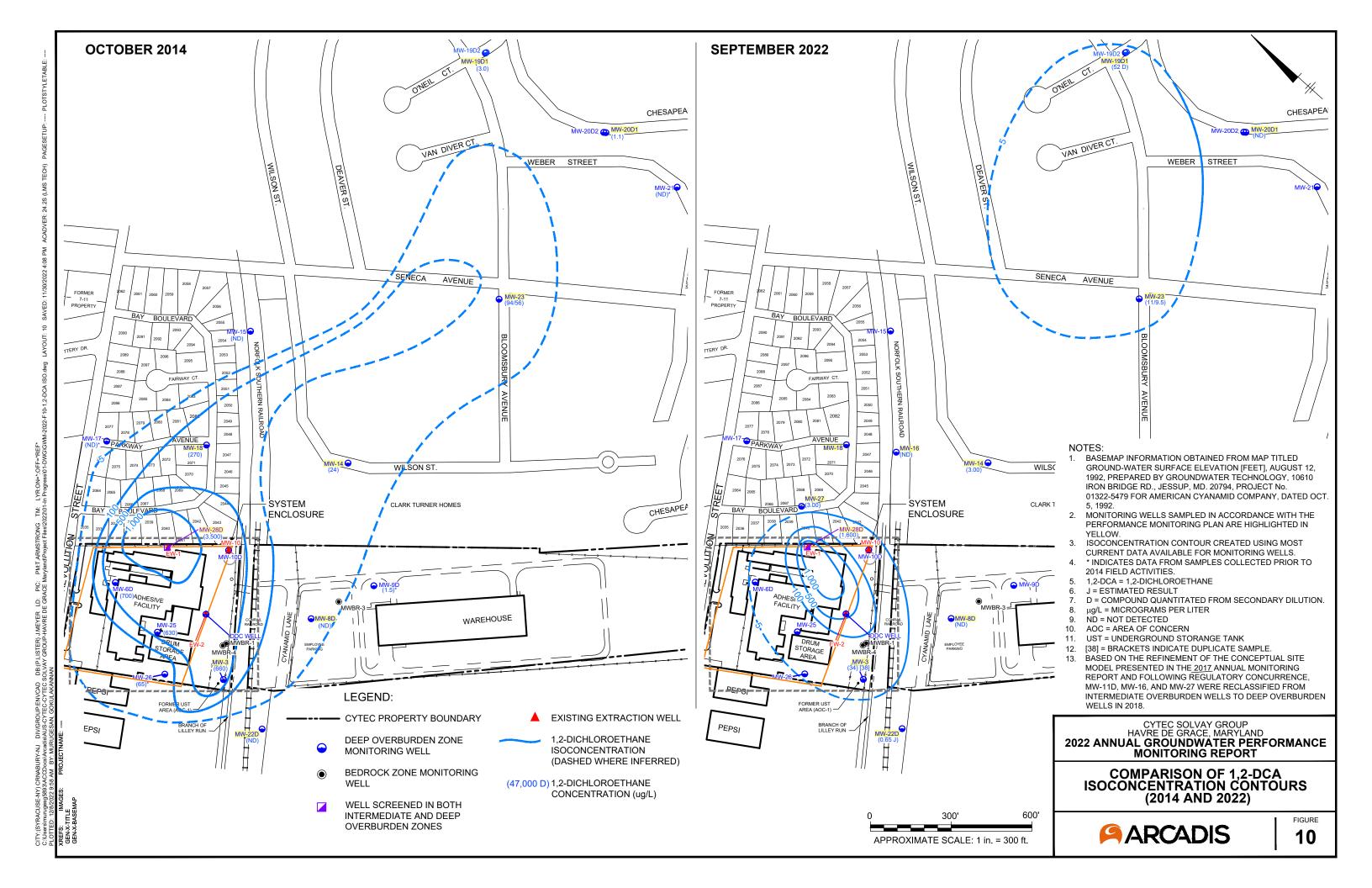
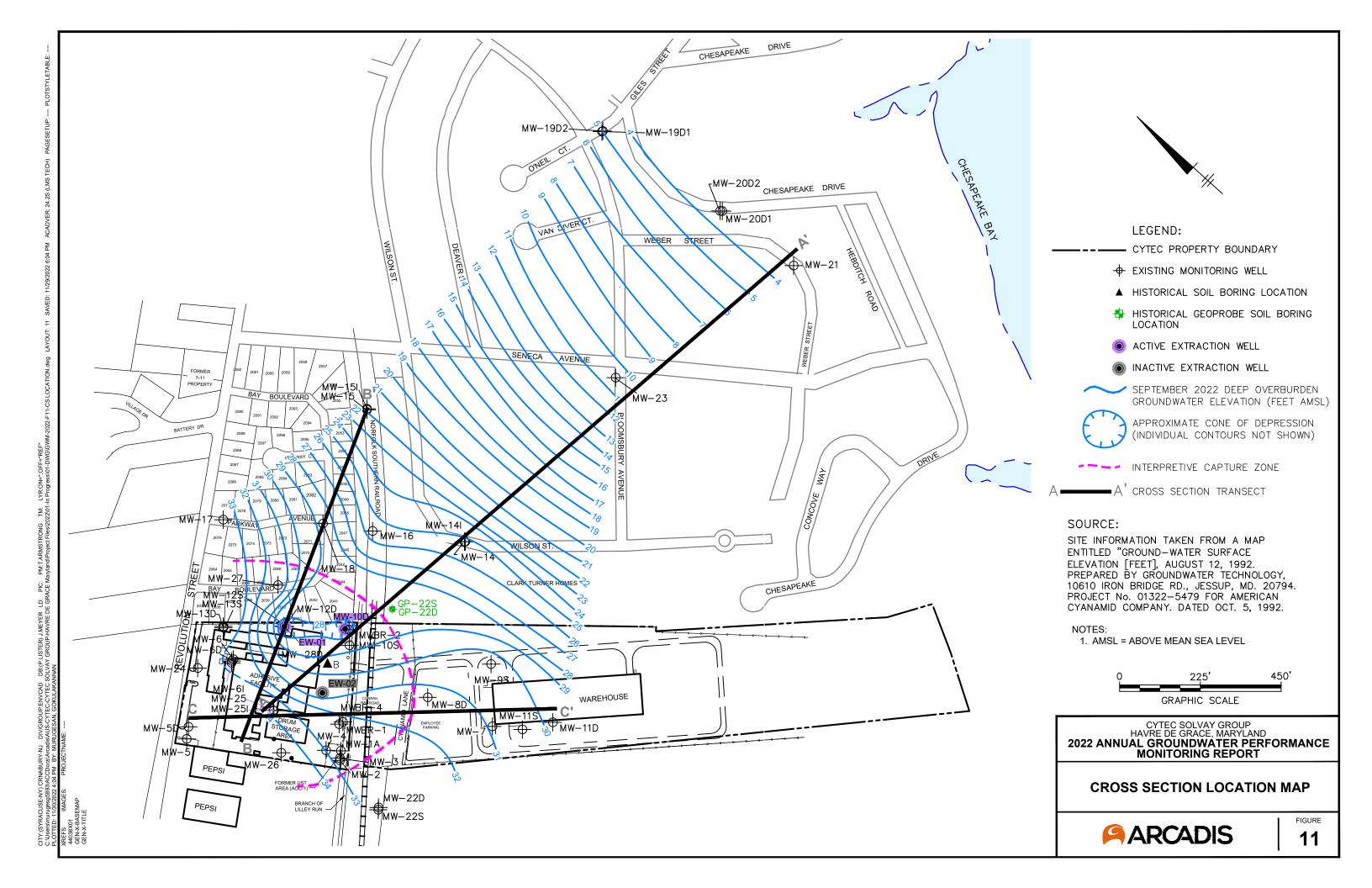
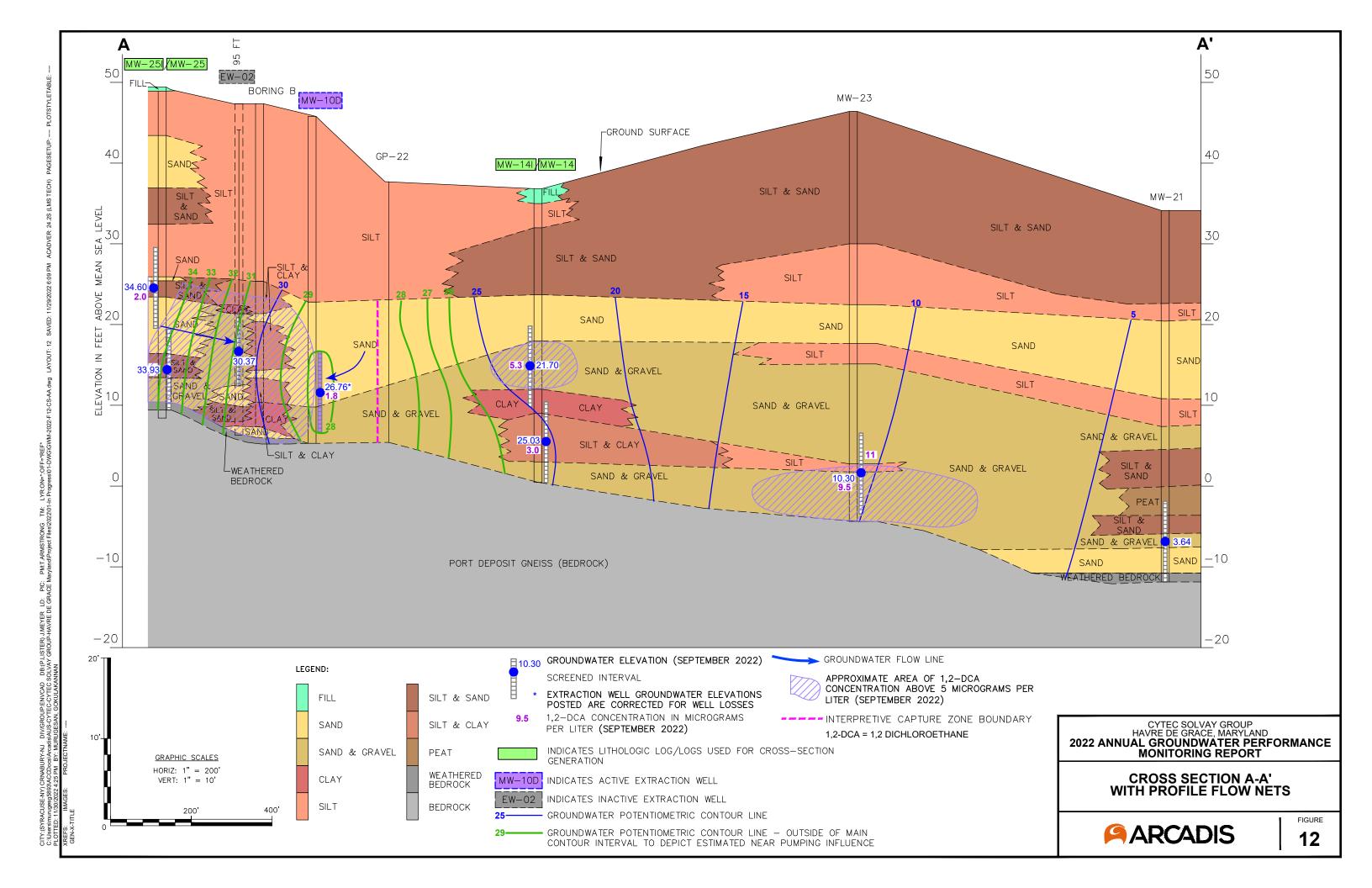


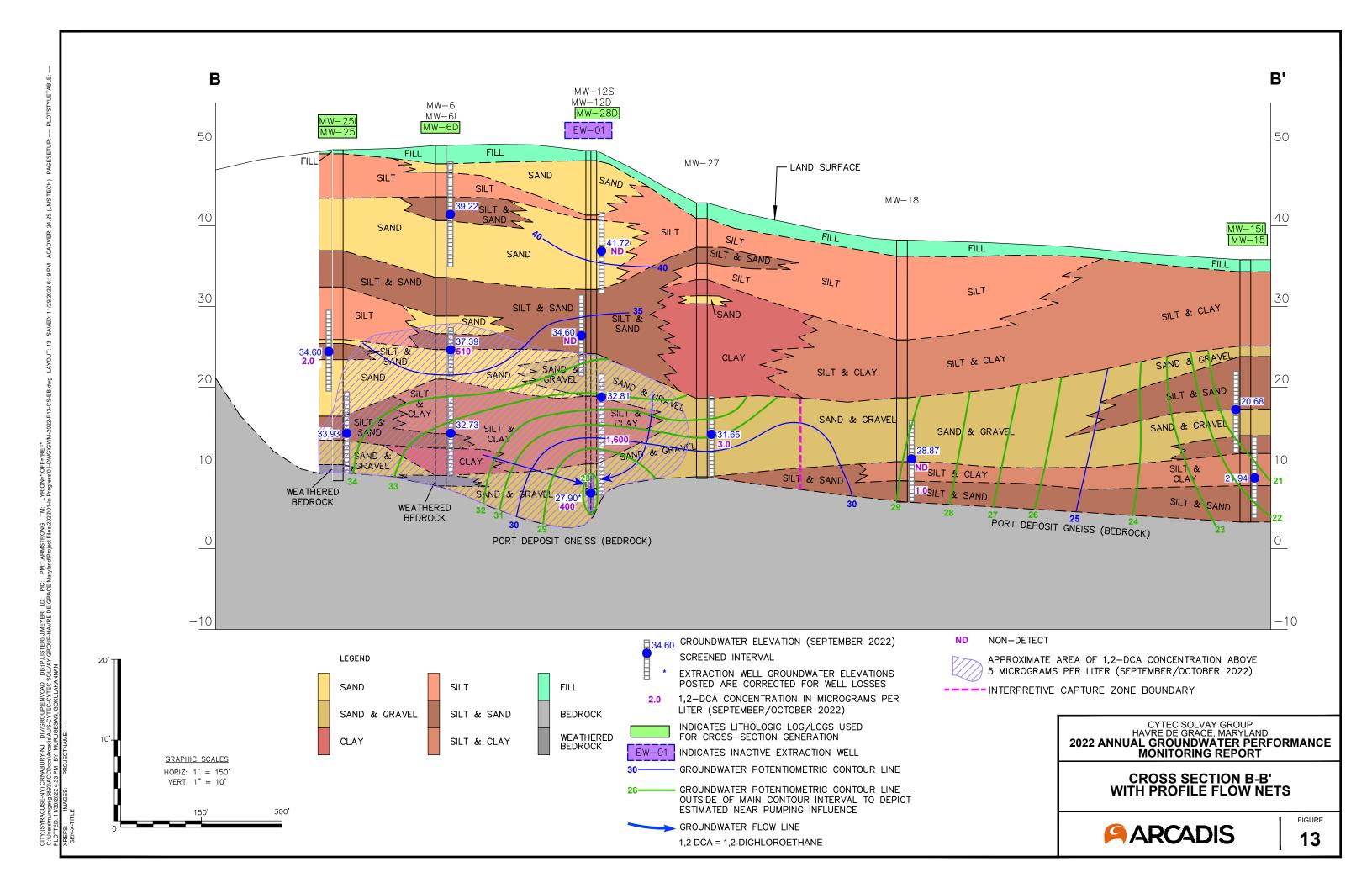
Figure 9
Mass Removal of 1,2-DCA and Methylene Chloride
Cytec Solvay Group
Havre de Grace, Maryland
2022 Annual Groundwater Performance Monitoring Report

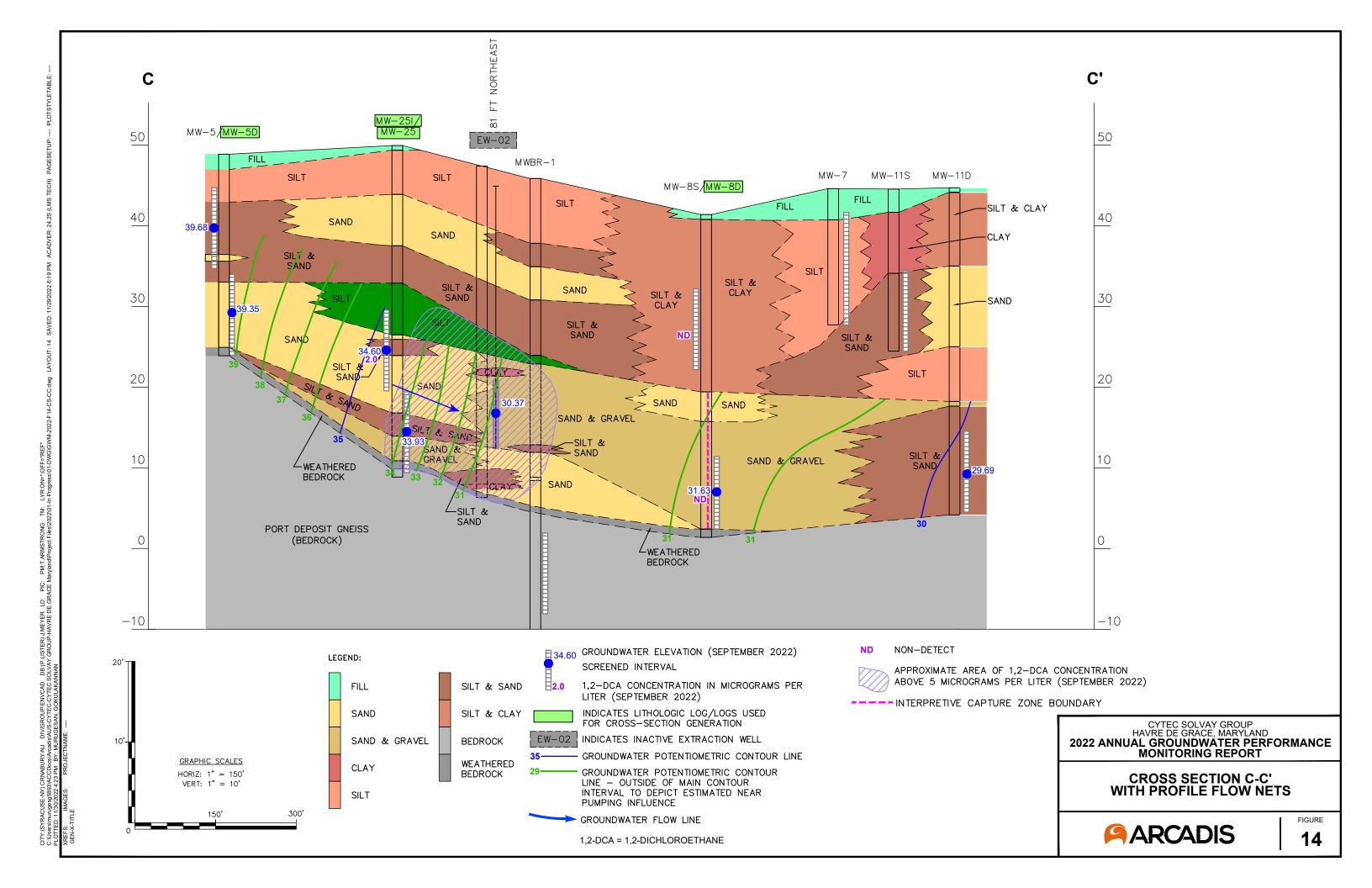












Cytec Solvay Group Havre de Grace, Maryland

2022 Annual Groundwater Performance Monitoring Report





Notes:

- 1. Nondetects are presented as zeros for graphing purposes.
- 2. Monitored natural attenuation parameters are collected annually at a subset of the monitoring wells including MW-3, MW-14I, MW-16, MW-18, MW-19D1, MW-20D1, MW-23, and MW-27.

μg/L = microgram per liter

mg/L = milligram per liter

s.u. = standard units

VOC = volatile organic compound

MNA = monitored natural

attenuation

Redox =

Appendix A

Field Documentation



Date	Activities							
12/9/2021	Arcadis staff were onsite to replace faulty pH probe and water-level transducer at EW-02.							
12/16/2021	An EW-02 pipe leak alarm was triggered during a period of heavy rainfall, as water infiltrated the well vault. The system restarted within 24 hours.							
12/21/2021	Multiple high differential flow alarms were received. These alarms may indicate a leak in the system if the effluent flow is higher than the influent flow. However, these alarms may also be triggered if there are a string of other alarms. The system was inspected and alarms were cleared on 1/11.							
1/11/2022	Arcadis staff on site to conduct routine operation and maintenance (O&M), including quarterly system sampling.							
1/15/2022	An EW-01 low level alarm was received, triggered by low water level in the extraction well. Additionally, the remote system access was unresponsive so the system could not be turned back on. The system remained shut down for the rest of the month. The alarm was cleared by onsite personnel on 1/20.							
1/16/2022	A drive fault alarm was received. The alarm was cleared by onsite personnel on 1/20 but the system remained shut down.							
1/20/2022	An E-stop alarm was received on 1/20. While the system remained shut down, the POTW facility notified Cytec that there may be a potential leak at the POTW pipe, prior to the system water entering the digester. Arcadis staff restarted the system on 2/1, determined there were no leaks present, and replaced corroded pipe above ground at the POTW.							
1/24/2022	A MW-10D high level alarm was received while the system remained shut down. This alarm may be triggered when water levels in MW-10D rise due to prolonged system shutdown.							
2/1/2022	Arcadis staff on site at POTW to replace corroded piping into digester.							
2/10/2022	An above ground leak was noted at POTW and the Cytec system was shut down until Arcadis staff could replace the leaking parts on 2/14. The system was restarted on 2/23.							
2/23/2022	Arcadis staff on site to repair faulty pH probe, clean the EW-02 flow meter, and to replace the remote access panel with upgraded model.							
2/28/2022	An E-stop alarm was received. The system was reset by Arcadis staff on 3/3.							
3/2/2022	An E-stop alarm was received. The system was reset by Arcadis staff on 3/3.							
3/9/2022	An EW-01 pipe leak alarm was triggered during a period of heavy rainfall, as water infiltrated the well vault. The system was restarted within 24 hours.							
3/15/2022	An P-300 overload fault alarm was received, as a result of the overload on the motor starter tripping (failing motor on EW-02 pump). Pumping at EW-02 remains shut down since this alarm was received, until a new motor can be installed by staff with proper electrical training.							
4/11/2022	An MW-10D vault sump high level alarm was received, usually indicative of a leak in the system. The system was restarted on 4/15 after inspection.							
4/12/2022	Arcadis staff on site to conduct routine O&M, including hydrojetting event. Arcadis and Parratt Wolff staff on site to conduct well rehabilitation event.							
5/3/2022	An E-stop alarm was received. The system was reset by on-site personnel and restarted within 24 hours of shutting down.							
5/5/2022	A drive fault alarm was received. The system was reset by on-site personnel and restarted within 24 hours of shutting down.							





Date	Activities
5/6/2022	An EW-01 pipe leak alarm was triggered during a period of heavy rainfall, as water infiltrated the well vault. The system was restarted within 24 hours.
5/24/2022	A drive fault alarm was received. The system was reset by on-site personnel and restarted within 24 hours of shutting down.
6/27/2022	System manually turned off due to pipe leak at MW-10D. Arcadis on site on 7/15 to replace leaking parts, including MD-10D flange and nipple.
7/7/2022	An EW-01 transducer failure alarm was received. Arcadis responded to this alarm on 8/25, the transducer needs to be replaced by staff with proper electrical training.
7/16/2022	A drive fault alarm was received. The system was reset by Arcadis staff on 7/18.
7/21/2022	An E-stop alarm was received. The system was reset by on-site personnel and restarted within 24 hours of shutting down.
8/17/2022	An E-stop alarm was received. The system was reset by on-site personnel and restarted on 8/23.
9/19/2022	An E-stop alarm was received. The system was reset by on-site personnel and restarted within 24 hours of shutting down.
10/5/2022	An E-stop alarm was received. The system was reset by on-site personnel and restarted within 24 hours of shutting down.
10/11/2022	A drive fault alarm was received. The system was reset by on-site personnel and restarted within 24 hours of shutting down.
11/26/2022	An E-stop alarm was received. The system was reset by on-site personnel and restarted on 11/29.



Well Identification	On/Off Facility	Туре	Total Depth (ft bgs)	Total Sounded Depth (ft bTOC)	Depth to Water (ft bTOC)	Stick Up or Flush Mount	Well Diameter (inches) - Material	Secured? (i.e., bolts or locks present?)	Capped? (i.e., well cap present with tight seal)	Any Damage Noted?	Additional Comments
DDC Well	On - Main	Pilot Sparge Well	40				4-PVC		Sear)		
EW-1	On - Main	Extraction	47	40.73	20.46	VOW +	6-SS	res	yes	no	
EW-2	On - Main	Extraction	34	29.41	11.53	Marth	6-SS	PES	yes	10	
MW-1A	On - Main	Monitoring	20	15,36	8.53	ST	2-SS	yes	yes	ne	
MW-2	On - Main	Monitoring	20.5	6.66	3.44	ST	2-SS	Yes	yes	no	
MW-3	On - Main	Monitoring	40	40,08	13.13	F	2-SS	yes	yes	no	
MW-4	On - Main	Monitoring	15	14.89	3.96	F	2-55	105	yes	no	
MW-5	On - Main	Monitoring	15	14.21	10.02	f	2-88	No	Yes	11/0	botts Missing
MW-5D	On - Main	Monitoring		23,83	9.20	F	2-PVC	No	yes	yes	botts broken in holes
MW-6	On - Main	Monitoring	16	13.22	1671	F	2-PVC	yes	yes.	10	polity windows in
MW-6D	On - Main	Monitoring		33.72	17.6	F	2-PUC	Yes	yes	yes	bot holes broken
MW-61	On - Main	Monitoring		28.06	12.81	F	2-8VC	yes	ves	rec	bolt holes broken
MW-7	On-Warehouse	Monitoring	18	15.05	6,71	F	Z-PUC	yes	ves	no	01/05 0/07
MW-8D	On-Warehouse	Monitoring	40	38.53	9,56	F	2-55	yes	Ves	no	
MW-8S	On-Warehouse	Monitoring	19	18.88	4.91	F	2-55	yes	Yes	16	
MW-9D	On-Warehouse	Monitoring	33	25.30	11.01	Ľ	2-55	yes.	yes	up	- 1
MW-9S	On-Warehouse	Monitoring	20	19.73	10.29	F	2-55	910	yes	nox	601ts add
MW-10D	On - Main	Extraction	39.2	32.31	15,94	Vault	6-55	Ves	yes	no	
MW-10S	On - Main	Monitoring	20	14.09	5.65	F	255	yes	yes	no	/ 0
MW-11D	On-Warehouse	Monitoring	40	31.96	14.84	F	2.55	yes	yes	no	under stone hext to first
MW-11S	On-Warehouse	Monitoring	20	19.97	6.06	F	2-55	yes	yes	no	Concrete Mer
MW-12D	On - Main	Monitoring	28	27.19	14.81	F	2-88	yes	yes	Ro	5,0,0,0
MW-12S	On - Main	Monitoring	18	17.34	7.90	F	2-SS	YEZ	ves	No	
MW-13D	On - Main	Monitoring	32	31.08	12.26	F	2-88	yes	yen	ires	lear broken
MW-13S	On - Main	Monitoring *	20	19.86	11.19	F	2-SS	yes	yes	Has	Bears broken
MW-14	Off	Monitoring	36	35,40	1140	F	2-SS	yes	Xes	YES	(but hele broke
MW-141	Off	Monitoring	26	24.95	14.10	F	Z-PVC	No	Yes	ves	both hotex broken
MW-15	Off	Monitoring	32	31.02	13.38	F	2-SS	Yes	Nes	10	3.77
MW-15!	Off	Monitoring	23	22.08	14.31	F	2-706	Yes	res	120	
MW-16	Off	Monitoring	37	36.25	12.52	F	2-SS	Ver	100	10	
MW-17	Off	Monitoring	10.6	10.33	6,30	F	2-PVC	No	res	yes	bult holes broken
MW-18	Off	Monitoring	32,5	30.62	9,50	F	2-SS	yes	yes	No	The second second



Well Identification	On/Off Facility	Туре	Total Depth (ft bgs)	Total Sounded Depth (ft bTOC)	Depth to Water (ft bTOC)	Stick Up or Flush Mount	Well Diameter (inches) - Material	Secured? (i.e., bolts or locks present?)	Capped? (i.e., well cap present with tight seal)	Any Damage Noted?	Additional Comments
MW-19D1	Off	Monitoring	44	44.35	24.26	F	2-24	no	yes	yes	bolt holes broken
MW-19D2	Off	Monitoring	74	74.91	32.03	F	29K	No	ves	res	bolt holes broken
MW-20D1	Off	Monitoring	47	36.74	31.21	F	ZPVC	ves	yers	Ke	1
MW-20D2	Off	Monitoring	95	95.32	21.89	F	2 PUC	ves	yes	HO	
MW-21	Off	Monitoring	46	45.31	36,20	F	2 PUC	AO	yes	res	tolt holes broken
MW-22D	Off	Monitoring	37.5	36.02	11.77	F	ZPVC	yes	Yes	no	P. C.
MW-22S	Off	Monitoring	17	10.65		F	ZPUC	res	res	WO	DIV
MW-23	Off	Monitoring	49.4	49.69	35.66	F	ZPK	NO	YES	yes	bolthaks broken
MW-24	On - Main	Monitoring		29,16	10:48	F	ZPVC	Notes	YES	NB	bolt heles broken
MW-25	On - Main	Monitoring		36.55	15:49	F	ZPK	res	yes	181	bolt hales broken
MW-251	On - Main	Monitoring	30	29.32	1494	F	2 Pik	yes	yes	yes	bolt holes broken
MW-26	On - Main	Monitoring		34.96	12.50	F	2 puc	yes	yes	no	
MW-27	Off	Monitoring	34	33 86	1/42	F	- PUR	yes	ves	No	
MW-28D	On - Main	Monitoring	42.5	41.95	16.33	F	2800	yes	yes	year	both hales Broken
MWBR-1	On - Main	Monitoring	54	54.85	13,49	F	ZPVC	yes	yes	res	3 bolt holes broken
MWBR-2	On - Main	Monitoring	78	79.09	15.63	F	2PK	yes	yes	185	1 botter broken
MWBR-3	On-Warehouse	Monitoring	100	34,48	10.78	F	2-Puc	no	yes	yes	bottoles proken
MWBR-4	On - Main	Monitoring	117	118 38	(4.4)	F	ZPK	yes	yes	ver	Golts Aplex broken





Site: Cytec	Location and Well ID: HDG, MW-14
Well Finish: Flush	Measuring Point: Top of Casing
Total Depth as Constructed (ft btoc):	Screened Interval (ft btoc): to
Well Casing Diameter: 2	Well Casing Material: PVC

Deployment

Date and Time of Deployment: 0	9/13/2022 09:25	Weather Condition: Sunny Total well depth at time of deployment (ft btoc): 35.4				
Depth to water at time of deploy	ment (ft btoc): 11.4					
Hydrasleeve length (in): 30	Hydrasleeve diame	eter (in): 1.5	Hydrasleeve™ model: Gsh110			
Deployment Method/Position of weight: Bottom Anchor: Weight attached to bottom of Hydrasleeve TM. Weight rest on well						
Deployment Depth (top of Hydra	sleeve™) (ft btoc): 35					

Date and time of Re	trieval: 09/14/202	2 09:25	Total Days of	Total Days of Deployment: 1		
Weather Condition:	Sunny		PID (ppm): 0.2			
Depth to Groundwaretrieval) (ft btoc): 1		trieval (measured before	Total Well De retrieval (ft b	epth at Time of Retrieval (measured before toc): 35.56		
Downhole Field Para	ameter Upon Ret	rieval:				
Temp (deg C) ORP (mV) pH		pН	DO (mg/L)	Cond (us/cm)		
18.41	138.6	5.9	2.8	0.128		
Water Quality Meter	: YSI 600 XLM		Serial #:			
Turbidity of Ground	water Sample (d	ispensed from Hydraslee	eve™):			
Turbidity Meter:			Serial#:			
Pre-filtered Turbidity	y (NTU):		Post-filtered Turbidity (NTU):			
Sample ID: MW14(0	91422)	Replicate ID:	Sample Time: 09:25			
Notes/Observations	: Clear			·		
Sampled for (minim	um volume (mL)	in parentheses): VOC				
QA/QC:			Field Sampling Technician(S): Person 1,Person 2			



Site: Cytec	Location and Well ID: HDG, MW-22D
Well Finish: Flush	Measuring Point: Top of Casing
Total Depth as Constructed (ft btoc):	Screened Interval (ft btoc): to
Well Casing Diameter: 2	Well Casing Material: PVC

Deployment

Date and Time of Deployment: 0	9/13/2022 10:22	Weather C	Weather Condition: Sunny			
Depth to water at time of deploy	ment (ft btoc): 11.77	Total well	Total well depth at time of deployment (ft btoc): 36.02			
Hydrasleeve length (in): 30	Hydrasleeve diamet	ter (in): 1.5	Hydrasleeve™ model: Gsh110			
Deployment Method/Position of weight: Bottom Anchor: Weight attached to bottom of Hydrasleeve TM. Weight rest on well						
Deployment Depth (top of Hydra	sleeve™) (ft btoc): 32					

Date and time of Re	trieval: 09/14/202	2 10:00	Total Days of Dep	loyment: 1	
Weather Condition:	Sunny		PID (ppm): 0		
Depth to Groundwater at Time of Retrieval (measured before retrieval) (ft btoc): 11.81			Total Well Depth at Time of Retrieval (measured before retrieval (ft btoc): 36.15		
Downhole Field Para	ameter Upon Ret	rieval:			
Temp (deg C)	ORP (mV)	рН	DO (mg/L)	Cond (us/cm)	
17.64	129.8	5.64	9.44	0.21	
Water Quality Meter Turbidity of Ground		spensed from Hydraslee	Serial #: ve™):		
Turbidity Meter:			Serial#:		
Pre-filtered Turbidity	y (NTU):		Post-filtered Turbidity (NTU):		
Sample ID: MW22D(091422)	Replicate ID:	Sam	ple Time: 10:00	
Notes/Observations	•	[F	100	F	
Sampled for (minim	um volume (mL)	in parentheses): VOC			
QA/QC:			Field Sampling Technician(S): Person 1,Person 2		



Site: Cytec	Location and Well ID: HDG, MW-8S
Well Finish: Flush	Measuring Point: Top of Casing
Total Depth as Constructed (ft btoc):	Screened Interval (ft btoc): to
Well Casing Diameter: 2	Well Casing Material: Ss

Deployment

Date and Time of Deployment: 0	9/13/2022 13:14	Weather Condition: Sunny Total well depth at time of deployment (ft btoc): 18.88			
Depth to water at time of deploy	ment (ft btoc): 4.91				
Hydrasleeve length (in): 38	Hydrasleeve diame	eter (in): 1.9	Hydrasleeve™ model: Gsh130		
Deployment Method/Position of weight: Bottom Anchor: Weight attached to bottom of Hydrasleeve TM. Weight rest on well Deployment Depth (top of Hydrasleeve™) (ft btoc): 16					

Date and time of Re	trieval: 09/14/202	2 10:30	Total Days o	f Deployment: 1		
Weather Condition:	Sunny		PID (ppm) : 0	PID (ppm): 0		
Depth to Groundwater at Time of Retrieval (measured before retrieval) (ft btoc): 5.32			Total Well Depth at Time of Retrieval (measured before retrieval (ft btoc): 18.73			
Downhole Field Para	ameter Upon Ret	rieval:				
Temp (deg C)	ORP (mV)	pH	DO (mg/L)	Cond (us/cm)		
21.19	12.1	5.91	4.95	0.651		
Water Quality Meter Turbidity of Ground		spensed from Hydraslee	Serial #: eve™):			
Turbidity Meter:			Serial#:			
Pre-filtered Turbidity	y (NTU):		Post-filtered Turbidity (NTU):			
			•			
Sample ID: MW8S(091422) Replicate ID: DUP01(09			91422) Sample Time: 10:30			
Notes/Observations	: Clear					
Sampled for (minim	um volume (mL)	in parentheses): VOC				
QA/QC: Duplicate			Field Sampling Technician(S): Person 1,Person 2			



Site: Cytec	Location and Well ID: HDG, MW-8D
Well Finish: Flush	Measuring Point: Top of Casing
Total Depth as Constructed (ft btoc):	Screened Interval (ft btoc): to
Well Casing Diameter: 2	Well Casing Material: Ss

Deployment

Date and Time of Deployment: 0	9/13/2022 13:09	Weather Condition: Sunny			
Depth to water at time of deploy	ment (ft btoc): 9.56	Total well depth at time of deployment (ft btoc): 38.53			
Hydrasleeve length (in): 30	Hydrasloovo diamot	or (in): 15	Hydrasloova IM model: Gch110		
, ,	ydrasleeve length (in): 30 Hydrasleeve diameter (in): 1.5 Hydrasleeve™ model: Gsh110 eployment Method/Position of weight: Bottom Anchor: Weight attached to bottom of Hydrasleeve TM. Weight rest on w				
Deployment Depth (top of Hydra	sleeve™) (ft btoc): 35				

Date and time of Retrieval: 09/14/2022 10:40			Total Days of	Total Days of Deployment: 1		
Weather Condition: Sunny			PID (ppm): 0	PID (ppm): 0		
Depth to Groundwater at Time of Retrieval (measured before retrieval) (ft btoc): 9.51			Total Well Depth at Time of Retrieval (measured before retrieval (ft btoc): 38.4			
Downhole Field Para	ameter Upon Ret	rieval:				
Temp (deg C)	ORP (mV)	рН	DO (mg/L)	Cond (us/cm)		
24.72	11.1	5.75	3.13	0.008		
Water Quality Meter	: YSI 600 XLM		Serial #:			
Turbidity of Ground	water Sample (d	spensed from Hydrasle	eve™):			
Turbidity Meter:			Serial#:			
Pre-filtered Turbidity (NTU):			Post-filtered Turbidity (NTU):			
Sample ID: MW8D(091422) Replicate ID:			Sample Time: 10:40			
Notes/Observations:	: Clear		•			
Sampled for (minim	um volume (mL)	in parentheses): VOC				
QA/QC:		Field Sampling Technician(S): Person 1,Person 2				



Site: Cytec	Location and Well ID: HDG, MW-13D		
Well Finish: Flush	Measuring Point: Top of Casing		
Total Depth as Constructed (ft btoc):	Screened Interval (ft btoc): to		
Well Casing Diameter: 2	Well Casing Material: Ss		

Deployment

Date and Time of Deployment: 0	9/13/2022 11:21	Weather Condition: Sunny			
Depth to water at time of deploy	ment (ft btoc): 12.26	Total well	Total well depth at time of deployment (ft btoc): 31.08		
Third and a constant (in) 20					
Hydrasleeve length (in): 30 Deployment Method/Position of y	,	Hydrasleeve diameter (in): 1.5 Hydrasleeve™ model: HS-2 ight: Bottom Anchor: Weight attached to bottom of Hydrasleeve TM. Weight rest on well			
Deployment Depth (top of Hydra		Jight attached to	bottom of Hydrasiceve Tivi. Weight rest on Wei		

Date and time of Retrieval: 09/14/2022 10:55			Total Days of Deployment: 1		
Weather Condition: Sunny			PID (ppm): 0		
Depth to Groundwater at Time of Retrieval (measured before retrieval) (ft btoc): 16.54			Total Well Depth at Time of Retrieval (measured before retrieval (ft btoc): 31.44		
Downhole Field Para	ameter Upon Ret	rieval:			
Temp (deg C)	ORP (mV)	рН	DO (mg/L)	Cond (us/cm)	
24.72	11.1	5.75	3.13	0.008	
Water Quality Meter Turbidity of Ground		spensed from Hydraslee	Serial #: ve™):		
Turbidity Meter:		Serial#:			
Pre-filtered Turbidity (NTU):			Post-filtered Turbidity (NTU):		
Sample ID: MW13D(091422)	Replicate ID:	Sample Time: 10:55		
Notes/Observations	: Clear				
Sampled for (minim	um volume (mL)	in parentheses): VOC			
QA/QC:		Field Sampling Technician(S): Person 1,Person 2			



Site: Cytec	Location and Well ID: HDG, MW-28D	
Well Finish: Flush	Measuring Point: Top of Casing	
Total Depth as Constructed (ft btoc):	Screened Interval (ft btoc): to	
Well Casing Diameter: 2	Well Casing Material: PVC	

Deployment

Hydrasleeve length (in): 30 Hydrasleeve diameter (in): 1.5 Hydrasleeve™ model: Gsh110	Date and Time of Deployment: 09	/13/2022 11:40	Weather Condition: Sunny		
	Depth to water at time of deployn	nent (ft btoc): 16.33	Total well	Total well depth at time of deployment (ft btoc): 41.95	
Deployment Method/Position of weight: Bottom Anchor: Weight attached to bottom of Hydrasleeve TM. Weight rest on v	Hydrasleeve length (in): 30 Hydrasleeve diameter (in): 1.5 Hydrasleeve™ model: Gsh110				
Deployment Depth (top of Hydrasleeve™) (ft btoc): 30					

Date and time of Retrieval: 09/14/2022 11:05			Total Days of Deployment: 1		
Weather Condition: Sunny			PID (ppm): 0		
Depth to Groundwater at Time of Retrieval (measured before retrieval) (ft btoc): 16.43			Total Well Depth at Time of Retrieval (measured before retrieval (ft btoc): 41.36		
Downhole Field Para	ameter Upon Ret	rieval:			
Temp (deg C)	ORP (mV)	рН	DO (mg/L)	Cond (us/cm)	
17.84	65.6	5.79	6.32	0.484	
Water Quality Meter Turbidity of Ground		spensed from Hydraslee	Serial #: ve™):		
Turbidity Meter:		Serial#:			
Pre-filtered Turbidity (NTU):			Post-filtered Turbidity (NTU):		
Commis ID: MM/00D/	004.400)	Danii ata ID.		Commis Times 44.05	
Sample ID: MW28D(Notes/Observations	•	Replicate ID:		Sample Time: 11:05	
Sampled for (minim	um volume (mL)	in parentheses): VOC			
QA/QC:		Field Sampling Technician(S): Person 1,Person 2			



Site: Cytec	Location and Well ID: HDG, MW-12S	
Well Finish: Flush	Measuring Point: Top of Casing	
Total Depth as Constructed (ft btoc):	Screened Interval (ft btoc): to	
Well Casing Diameter: 2	Well Casing Material: Ss	

Deployment

Date and Time of Deployment: 09/13/2022 11:44		Weather C	Weather Condition: Sunny		
Depth to water at time of deployment (ft btoc): 7.9		Total well	Total well depth at time of deployment (ft btoc): 17.34		
Hydrasleeve length (in): 30	Hydrasleeve diame	eter (in): 1.5	Hydrasleeve™ model: Gsh110		
Deployment Method/Position of weight: Bottom Anchor: Weight attached to bottom of Hydrasleeve TM. Weight rest on well Deployment Depth (top of Hydrasleeve™) (ft btoc): 15					

Weather Condition: Sunny Depth to Groundwater at Time of Retrieval (measured before		Total Days of D	Total Days of Deployment: 1 PID (ppm): 0		
		PID (ppm): 0			
		Total Well Depth at Time of Retrieval (measured before retrieval (ft btoc): 17.31			
Downhole Field Para	ameter Upon Retri	eval:			
Temp (deg C)	Temp (deg C) ORP (mV) pH DO (mg/L) Cond (us/cn			Cond (us/cm)	
20.61	35	6.11	6.58	1.165	
Water Quality Meter Turbidity of Ground		pensed from Hydraslee	Serial #: eve™):		
Turbidity Meter:			Serial#:		
Pre-filtered Turbidity (NTU):		Post-filtered Turbidity (NTU):			
Sample ID: MW12S(91422)	Replicate ID:	Sa	ample Time: 11:15	
Notes/Observations:	· · · · · · · · · · · · · · · · · · ·	•			
Sampled for (minim	um volume (mL) ir	parentheses): VOC			
QA/QC:		Field Sampling Technician(S): Person 1			



Site: Cytec	Location and Well ID: HDG, MW-12D	
Well Finish: Flush	Measuring Point: Top of Casing	
Total Depth as Constructed (ft btoc):	Screened Interval (ft btoc): to	
Well Casing Diameter: 2	Well Casing Material: Ss	

Deployment

Date and Time of Deployment: 09/13/2022 11:46		Weather C	Weather Condition: Sunny		
Depth to water at time of deployment (ft btoc): 14.81		Total well	Total well depth at time of deployment (ft btoc): 27.19		
Hydrasleeve length (in): 38	Hydrasleeve diame	ter (in): 10	Hydrasleeve™ model: Gsh130		
, ,		. ,	bottom of Hydrasleeve TM. Weight rest on well		
Deployment Depth (top of Hydra	sleeve™) (ft btoc): 26.5				

Weather Condition: Sunny Depth to Groundwater at Time of Retrieval (measured before		Total Days of Deployment: 1 PID (ppm): 0 Total Well Depth at Time of Retrieval (measured before retrieval (ft btoc): 27.27							
					Downhole Field Para	ameter Upon Ret	rieval:		
					Temp (deg C) ORP (mV) pH			DO (mg/L)	Cond (us/cm)
18.03	69.1	6.09	7.26	0.732					
Water Quality Meter		ispensed from Hydraslee	Serial #: ve™):						
Turbidity Meter:			Serial#:						
Pre-filtered Turbidity	/ (NTU):		Post-filtered Turbidity (NTU):						
Sample ID: MW12D(091422)	Replicate ID: MW12D(0	91422)	Sample Time: 11:25					
Notes/Observations:	: Clear	•		•					
Sampled for (minim	um volume (mL)	in parentheses): VOC							
QA/QC: MS/SD		Field Sampling Technician(S): Person 1,Person 2							



Site: Cytec	Location and Well ID: HDG, MW-25I
Well Finish: Flush	Measuring Point: Top of Casing
Total Depth as Constructed (ft btoc):	Screened Interval (ft btoc): to
Well Casing Diameter: 2	Well Casing Material: PVC

Deployment

Date and Time of Deployment: 09/13/2022 12:19		Weather C	Weather Condition: Sunny		
Depth to water at time of deployment (ft btoc): 14.94		Total well	Total well depth at time of deployment (ft btoc): 29.32		
_					
Hydrasleeve length (in): 30	Hydrasleeve diame	ter (in): 1.5	Hydrasleeve™ model: Gsh110		
Deployment Method/Position of weight: Bottom Anchor: Weight attached to bottom of Hydrasleeve TM. Weight rest on well					
Deployment Depth (top of Hydra	sleeve™) (ft btoc): 28.5				

Weather Condition: Sunny Depth to Groundwater at Time of Retrieval (measured before		Total Days of	Total Days of Deployment: 1 PID (ppm): 0		
		PID (ppm) : 0			
		Total Well Depth at Time of Retrieval (measured before retrieval (ft btoc): 29.25			
Downhole Field Para	ameter Upon Ret	rieval:			
Temp (deg C)	Temp (deg C) ORP (mV) pH			Cond (us/cm)	
17.99	143	5.07	6.66	0.553	
Water Quality Meter Turbidity of Ground		spensed from Hydraslee	Serial #: eve™):		
Turbidity Meter:			Serial#:		
Pre-filtered Turbidity	y (NTU):		Post-filtered Turbidity (NTU):		
Sample ID: MW25I(0	91422)	Replicate ID:		Sample Time: 11:40	
Notes/Observations	: Clear				
Sampled for (minim	um volume (mL)	in parentheses): VOC			
QA/QC:		Field Sampling Technician(S): Person 1,Person 2			



Site: Cytec	Location and Well ID: HDG, MW-4	
Well Finish: Flush	Measuring Point: Top of Casing	
Total Depth as Constructed (ft btoc):	Screened Interval (ft btoc): to	
Well Casing Diameter: 2	Well Casing Material: Ss	

Deployment

Date and Time of Deployment: 09/13/2022 12:30		Weather C	Weather Condition: Sunny	
Depth to water at time of deployment (ft btoc): 3.96		Total well	Total well depth at time of deployment (ft btoc): 14.89	
			I	
Hydrasleeve length (in): 30	Hydrasleeve diamet	er (in): 1.5	Hydrasleeve™ model: Gsh110	
Deployment Method/Position of weight: Bottom Anchor: Weight attached to bottom of Hydrasleeve TM. Weight rest on well				
Deployment Depth (top of Hydra	sleeve™) (ft btoc): 12			

Date and time of Retrieval: 09/14/2022 11:50		Total Days of Deployment: 1			
Depth to Groundwater at Time of Retrieval (measured before		PID (ppm): 0 Total Well Depth at Time of Retrieval (measured before retrieval (ft btoc): 15			
					Downhole Field Para
Temp (deg C)	Temp (deg C) ORP (mV) pH		DO (mg/L)	Cond (us/cm)	
20.99	327.09	5.9	6.16 0.943		
Water Quality Meter Turbidity of Ground		spensed from Hydraslee	Serial #: eve™):		
Turbidity Meter:			Serial#:		
Pre-filtered Turbidity (NTU):		Post-filtered Turbidity (NTU):			
Sample ID: MW4(09	1/122)	Replicate ID:	Samn	le Time: 11:50	
Notes/Observations		Replicate ID.	Запір	ie i iiiie. 11.00	
Sampled for (minim	um volume (mL)	in parentheses): VOC			
QA/QC:		Field Sampling Technician(S): Person 1,Person 2			



Site: Cytec	Location and Well ID: HDG, MW-6I
Well Finish: Flush	Measuring Point: Top of Casing
Total Depth as Constructed (ft btoc):	Screened Interval (ft btoc): to
Well Casing Diameter: 2	Well Casing Material: PVC

Deployment

Date and Time of Deployment: 09/13/2022 12:55		Weather C	Weather Condition: Sunny	
Depth to water at time of deployment (ft btoc): 12.81		Total well	Total well depth at time of deployment (ft btoc): 28.06	
		•	_	
Hydrasleeve length (in): 30	Hydrasleeve diamet	er (in): 1.5	Hydrasleeve™ model: Gsh110	
Deployment Method/Position of weight: Bottom Anchor: Weight attached to bottom of Hydrasleeve TM. Weight rest on well				
Deployment Depth (top of Hydrasleeve™) (ft btoc): 26.5				

Weather Condition: Sunny Depth to Groundwater at Time of Retrieval (measured before T		Total Days of Deployment: 1 PID (ppm): 0			
					Total Well Depth at Time of Retrieval (measured before retrieval (ft btoc): 28.33
		Downhole Field Para	ameter Upon Ret	rieval:	
Temp (deg C)	ORP (mV)	рН	DO (mg/L)	Cond (us/cm)	
20.2	75.8	5.33	6.4	0.535	
Water Quality Meter		ispensed from Hydraslee	Serial #: ve™):		
Turbidity Meter:		-	Serial#:		
Pre-filtered Turbidity (NTU):		Post-filtered Turbidity (NTU):			
Sample ID: MW6I(09	1422)	Replicate ID:	[:	Sample Time: 12:00	
Notes/Observations	: Clear				
Sampled for (minim	um volume (mL)	in parentheses): VOC			
QA/QC:		Fie		Field Sampling Technician(S): Person 1,Person 2	



Site: Cytec	Location and Well ID: HDG, MW-18
Well Finish: Flush	Measuring Point: Top of Casing
Total Depth as Constructed (ft btoc):	Screened Interval (ft btoc): to
Well Casing Diameter: 2	Well Casing Material: PVC

Deployment

Date and Time of Deployment: 09/13/2022 08:45		Weather C	Weather Condition: Sunny	
Depth to water at time of deployment (ft btoc): 9.5		Total well	Total well depth at time of deployment (ft btoc): 30.62	
		•	_	
Hydrasleeve length (in): 30	Hydrasleeve diamet	er (in): 1.5	Hydrasleeve™ model: GHS110	
Deployment Method/Position of weight: Bottom Anchor: Weight attached to bottom of Hydrasleeve TM. Weight rest on well				
Deployment Depth (top of Hydrasleeve™) (ft btoc): 24				

Weather Condition: Sunny Depth to Groundwater at Time of Retrieval (measured before 1)		Total Days of Deployment: 2 PID (ppm): 0		
		Downhole Field Para	ameter Upon Reti	ieval:
Temp (deg C)	ORP (mV)	рН	DO (mg/L)	Cond (us/cm)
19.87	120.2	6.96	5.75	0.336
Water Quality Meter Turbidity of Ground		spensed from Hydraslee	Serial #: ve™):	
Turbidity Meter:			Serial#:	
Pre-filtered Turbidity	y (NTU):		Post-filtered Turbidity (NTU):	
Sample ID: MW18(0)	91522)_24 ,	Replicate ID:	Sam	ple Time: 08:10
Notes/Observations	* *	1 -	<u> </u>	
Sampled for (minim	um volume (mL)	in parentheses):		
QA/QC:			Field Sampling Technician(S): Person 1,Person 2	



Site: Cytec	Location and Well ID: HDG, MW-27
Well Finish: Flush	Measuring Point: Top of Casing
Total Depth as Constructed (ft btoc):	Screened Interval (ft btoc): to
Well Casing Diameter: 2	Well Casing Material: PVC

Deployment

Date and Time of Deployment: 09/13/2022 09:01		Weather C	Weather Condition: Sunny	
Depth to water at time of deployment (ft btoc): 11.42		Total well	Total well depth at time of deployment (ft btoc): 33.86	
Hydrasleeve length (in): 30	Hydrasleeve diame	ter (in): 15	Hydrasleeve™ model: Gsh110	
eployment Method/Position of weight: Bottom Anchor: Weight a		. ,		
Deployment Depth (top of Hydrasleeve™) (ft btoc): 41.5				

Date and time of Retrieval: 09/15/2022 07:45		Total Days of	Total Days of Deployment: 2	
Weather Condition: Sunny		PID (ppm) : 0		
Depth to Groundwater at Time of Retrieval (measured before retrieval) (ft btoc): 11.67		Total Well Depth at Time of Retrieval (measured before retrieval (ft btoc): 33.69		
Downhole Field Para	ameter Upon Ret	rieval:		
Temp (deg C)	ORP (mV)	рН	DO (mg/L)	Cond (us/cm)
21.03	142	6.54	5.73	0.167
Water Quality Meter Turbidity of Ground		ispensed from Hydraslee	Serial #: ve™):	
Turbidity Meter:		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Serial#:	
Pre-filtered Turbidity (NTU):		Post-filtered Turbidity (NTU):		
Sample ID: MW27(0	91522)	Replicate ID:		Sample Time: 07:45
Notes/Observations	: Clear	•		
Sampled for (minim	um volume (mL)	in parentheses):		
QA/QC:			Field Sampling Technician(S): Person 1,Person 2	



Site: Cytec	Location and Well ID: HDG, MW-14I
Well Finish: Flush	Measuring Point: Top of Casing
Total Depth as Constructed (ft btoc):	Screened Interval (ft btoc): to
Well Casing Diameter: 2	Well Casing Material: GHS110

Deployment

Date and Time of Deployment: 09/13/2022 09:14		Weather C	Weather Condition: Sunny	
Depth to water at time of deployment (ft btoc): 14.1		Total well	Total well depth at time of deployment (ft btoc): 24.95	
Hydrasleeve length (in): 30	Hydrasleeve diame	eter (in): 1.5	Hydrasleeve™ model: Gsh110	
reployment Method/Position of weight: Bottom Anchor: Weight attached to bottom of Hydrasleeve TM. Weight rest on well-beloyment Depth (top of Hydrasleeve™) (ft btoc): 23				

Date and time of Retrieval: 09/15/2022 08:30		Total Days of	Total Days of Deployment: 2	
Weather Condition: Sunny		PID (ppm): 0		
Depth to Groundwater at Time of Retrieval (measured before retrieval) (ft btoc): 14.38		Total Well Depth at Time of Retrieval (measured before retrieval (ft btoc): 25.12		
Downhole Field Para	ameter Upon Ret	rieval:		
Temp (deg C)	ORP (mV)	P (mV) pH		Cond (us/cm)
19.5	159.7	5.59	5.39	0.277
Water Quality Meters Turbidity of Grounds		ispensed from Hydraslee	Serial #: ve™):	
Turbidity Meter:			Serial#:	
Pre-filtered Turbidity	/ (NTU):		Post-filtered Turbidity (NTU):	
		In	Ī	
Sample ID: MW14I(0	91522)	Replicate ID: Sample Time: 08:30		Sample Time: 08:30
Notes/Observations:	: Clear			
Sampled for (minim	um volume (mL)	in parentheses):		
QA/QC:			Field Sampling Technician(S): Person 1,Person 2	



Site: Cytec	Location and Well ID: HDG, MW-23
Well Finish: Flush	Measuring Point: Top of Casing
Total Depth as Constructed (ft btoc):	Screened Interval (ft btoc): to
Well Casing Diameter: 2	Well Casing Material: PVC

Deployment

Date and Time of Deployment: 09/13/2022 09:33		Weather C	Weather Condition: Sunny		
Depth to water at time of deployment (ft btoc): 35.66		Total well	Total well depth at time of deployment (ft btoc): 49.69		
			T		
Hydrasleeve length (in): 30	Hydrasleeve diamet	ter (in): 1.5	Hydrasleeve™ model: Gsh110		
Deployment Method/Position of weight: Bottom Anchor: Weight attached to bottom of Hydrasleeve TM. Weight rest on well					
Deployment Depth (top of Hydra	sleeve™) (ft btoc): 40				

Weather Condition: Sunny Depth to Groundwater at Time of Retrieval (measured before		Total Days of Deployment: 2 PID (ppm): 0 Total Well Depth at Time of Retrieval (measured before retrieval (ft btoc): 49.32							
					Downhole Field Para	ameter Upon Retr	eval:		
					Temp (deg C)	Temp (deg C) ORP (mV) pH			Cond (us/cm)
15.23	100.2	5.21	2.5	0.233					
Water Quality Meter Turbidity of Ground		pensed from Hydraslee	Serial #: ve™):						
Turbidity Meter:			Serial#:						
Pre-filtered Turbidity	y (NTU):		Post-filtered Turbidity (NTU):						
	0.1500) 10	la " , "	lo.	L T' 00 00					
Sample ID: MW23(09		Replicate ID:	Sam	ple Time: 09:00					
Notes/Observations	: 40, 47								
Sampled for (minim	um volume (mL) i	n parentheses):							
QA/QC:		Field Sampling Technician(S): Person 1,Person 2							



Site: Cytec	Location and Well ID: HDG, MW-20D1
Well Finish: Flush	Measuring Point: Top of Casing
Total Depth as Constructed (ft btoc):	Screened Interval (ft btoc): to
Well Casing Diameter: 2	Well Casing Material: PVC

Deployment

Date and Time of Deployment: 09/13/2022 09:46		Weather Condition: Sunny		
Depth to water at time of deployment (ft btoc): 31.21		Total well	Total well depth at time of deployment (ft btoc): 36.74	
Hydrasleeve length (in): 30	Hydrasleeve diame	ter (in): 1.5	Hydrasleeve™ model: Gsh110	
Deployment Method/Position of N	of weight: Bottom Anchor: Weight attached to bottom of Hydrasleeve TM. Weight rest on well			

Date and time of Retrieval: 09/15/2022 09:50		Total Days of Deployment: 2			
Depth to Groundwater at Time of Retrieval (measured before		PID (ppm): 0	PID (ppm): 0		
		Total Well Depth at Time of Retrieval (measured before retrieval (ft btoc): 46.6			
Downhole Field Para	ameter Upon Ret	rieval:			
Temp (deg C)	Temp (deg C) ORP (mV) pH			Cond (us/cm)	
15.13	102.3	5.79	5.78	0.133	
Water Quality Meter Turbidity of Ground		ispensed from Hydraslee	Serial #: ve™):		
Turbidity Meter:			Serial#:		
Pre-filtered Turbidity	y (NTU):		Post-filtered Turbidity (NTU):		
Sample ID: MW20D1	1(091522)	Replicate ID:		Sample Time: 09:50	
Notes/Observations	: Clear				
Sampled for (minim	um volume (mL)	in parentheses):			
QA/QC:			Field Sampling Technician(S): Person 1,Person 2		



Site: Cytec	Location and Well ID: HDG, MW-3
Well Finish: Flush	Measuring Point: Top of Casing
Total Depth as Constructed (ft btoc):	Screened Interval (ft btoc): to
Well Casing Diameter: 2	Well Casing Material: Ss

Deployment

Date and Time of Deployment: 09/13/2022 12:34		Weather Condition: Sunny		
Depth to water at time of deployment (ft btoc): 13.14		Total well	Total well depth at time of deployment (ft btoc): 40.08	
Hydrasleeve length (in): 5	Hydrasleeve diame	ter (in): 1.9	Hydrasleeve™ model: Gsh440	
la attaina	loyment Method/Position of weight: Bottom Anchor: Weight attached to bottom of Hydrasleeve TM. Weight rest on welloyment Depth (top of Hydrasleeve™) (ft btoc): 37			

Weather Condition: Sunny Depth to Groundwater at Time of Retrieval (measured before		Total Days o	Total Days of Deployment: 2 PID (ppm): 0		
		PID (ppm) : 0			
		Total Well Depth at Time of Retrieval (measured before retrieval (ft btoc): 40			
Downhole Field Para	ameter Upon Ret	rieval:			
Temp (deg C) ORP (mV) pH			DO (mg/L)	Cond (us/cm)	
18.34	61.9	9.21	8.9	0.228	
Water Quality Meter		spensed from Hydraslee	Serial #: ve™):		
Turbidity Meter:			Serial#:		
Pre-filtered Turbidity	/ (NTU):		Post-filtered Turbidity (NTU):		
Sample ID: MW3(09	1522)	Replicate ID: DUP02(09	91522)	Sample Time: 10:45	
Notes/Observations:	: Hydra sleeve lea	ked, high volume of sample	e lost.	1	
Sampled for (minim	um volume (mL)	in parentheses): VOC			
QA/QC: Duplicate		Field Sampling Technician(S): Person 1,Person 2			



Site: Cytec	Location and Well ID: HDG, MW-19D1
Well Finish: Flush	Measuring Point: Top of Casing
Total Depth as Constructed (ft btoc):	Screened Interval (ft btoc): to
Well Casing Diameter: 2	Well Casing Material: PVC

Deployment

Date and Time of Deployment: 09/13/2022 14:25		Weather C	Weather Condition: Sunny	
Depth to water at time of deployment (ft btoc): 24.26		Total well	Total well depth at time of deployment (ft btoc): 44.35	
Hydrasleeve length (in): 30	Hydrasleeve diamet	er (in): 1.5	Hydrasleeve™ model: Gsh110	
Deployment Method/Position of weight: Bottom Anchor: Weight attached to bottom of Hydrasleeve TM. Weight rest on well				
Deployment Depth (top of Hydra	sleeve™) (ft btoc): 39			

Weather Condition: Sunny Depth to Groundwater at Time of Retrieval (measured before		Total Days of Deployment: 2 PID (ppm): 0 Total Well Depth at Time of Retrieval (measured before retrieval (ft btoc): 43.96							
					Downhole Field Para	ameter Upon Retr	ieval:		
					Temp (deg C)	Temp (deg C) ORP (mV) pH			Cond (us/cm)
15.42	93.4	5.83	6.47	0.179					
Water Quality Meter Turbidity of Ground		spensed from Hydraslee	Serial #: ve™):						
Turbidity Meter:			Serial#:						
Pre-filtered Turbidity	y (NTU):		Post-filtered Turbidity (NTU):						
Sample ID: MW19DI	(91522)	Replicate ID:	Sam	pple Time: 09:30					
Notes/Observations			Į dani						
Sampled for (minim	um volume (mL) i	n parentheses):							
QA/QC:		Field Sampling Technician(S): Person 1,Person 2							



Site: Cytec	Location and Well ID: HDG, MW-16
Well Finish: Flush	Measuring Point: Top of Casing
Total Depth as Constructed (ft btoc):	Screened Interval (ft btoc): to
Well Casing Diameter: 2	Well Casing Material: Ss

Deployment

Date and Time of Deployment: 0	9/13/2022 10:11	Weather Condition: Sunny							
Depth to water at time of deploy	ment (ft btoc): 12.52	Total well depth at time of deployment (ft btoc): 36.25							
Hydrasleeve length (in): 30	Hydrasleeve diame	ter (in): 15	Hydrasleeve™ model: Gsh110						
, ,		` '	b bottom of Hydrasleeve TM. Weight rest on well						
Deployment Depth (top of Hydra	sleeve™) (ft btoc): 30								

Date and time of Re	trieval: 09/15/202	2 12:00	Total Days of	Deployment: 2					
Weather Condition:	Sunny		PID (ppm) : 0						
Depth to Groundwat retrieval) (ft btoc): 1		trieval (measured before	Total Well Depth at Time of Retrieval (measured before retrieval (ft btoc): 36.3						
Downhole Field Para	ameter Upon Ret	rieval:							
Temp (deg C)	ORP (mV)	pH	DO (mg/L)	Cond (us/cm)					
15.54	-91.1	7.76	2.1	0.222					
Water Quality Meter Turbidity of Ground		spensed from Hydraslee	Serial #: ve™):						
Turbidity Meter:			Serial#:						
Pre-filtered Turbidity	y (NTU):		Post-filtered T	Furbidity (NTU):					
Sample ID: MW16(09	91522)	Replicate ID:	:	Sample Time: 12:00					
Notes/Observations	: Clear								
Sampled for (minim	um volume (mL)	in parentheses):							
QA/QC:			Field Samplin	g Technician(S): Person 1,Person 2					

301 Alpha Drive RIDC Park Pittsburgh, PA 15238 Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

seurofins

Environment Testing America

Client Information							Carrier Tracking	j No(s):	COC No: 180-83959-141	17.2
Client Contact: Ms. Shwetha Sridharan	Phone:	10186	E-Mail: Jill.Coluss	sv@et e	urofinsu	s com	State of Origin:	~ land	Page: Page 2 of 5	
Company: ARCADIS U.S., Inc.		PWSID:		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	u. 0.11.100	Analysis Re		C Jones	Job #:	
Address: 7550 Teague Road Suite 210	Due Date Requested:	14. 1	7		1	Analysis Re	equested		Preservation Co	odes:
City:	TAT Requested (days):	tandasc	4	ш		10 11 11			A - HCL	M - Hexane N - None
Hanover State, Zip:	/	Vormal	- 11	li et	4 5		111		B - NaOH C - Zn Acetate	O - AsNaO2 P - Na2O4S
MD, 21076	Compliance Project: A Yes				3	٥			D - Nitric Acid E - NaHSO4	Q - Na2SO3 R - Na2S2O3
Phone: 302-897-8993(Tel)	PO #: 30005455.0002.			Q	3 6	F	1 6 1		F - MeOH G - Amchlor	S - H2SO4 T - TSP Dodecahydrate
Email:	WO #:		1	18	2	1-10			H - Ascorbic Acid I - Ice	U - Acetone V - MCAA
shwetha.sridharan@arcadis.com Project Name:	30114618 Project #:		Yes or No	02	dire	100	1		J - DI Water K - EDTA	W - pH 4-5
Cytec Havre de Grace MD Site: 4	18017987				2 8	(2)			L - EDA	Y - Trizma Z - other (specify)
De of and	SSOW#:			l,	98	~~			Other:	
Sample Identification	Sample Date Time	Type (w=	atrix 2 water, 3 solid, 3 sste/oil, 3 ue, A=Air) iii	430	2009	3060			Special	nstructions/Note:
		Preservation C							Operation 1	istractions/Note.
DUPO1 091422	9/14/22 1200	6 4	1 1	13	H					
MW18 (09/522) - 24	9/15/22 0810	GU	2 44		11	12	+ -			
MW18 (091522) 31	9/15/22 0820			1	11	12				
MW27 (091522)	9/15/22 0745		2 1	-3	11	(2				
MW14I/091522	9/15/22 0830	6 4		- 3	11	12				
My 23/091522 -40	9/15/27 0900		es 22	3	,	12				
MW 23 (0915 22) -47	9/15/22 0910	-	win	3	11	12			-	
MW 19 DI (09/522)	9/5/22 0930		- 1	3	1 1		-			
M4)20 D1 (091522)	9/15/22 09.50		w 100	3	11	12				
My 3 621522	9/5/22 1045					12				
MW16 (091522)	9/15/22 1200			03		12	++-		-	
Pussible Hazard Identification	1413/02/100	6 2	V)isposa		assessed if e	mples are rately	ned longer than 1	(
Non-Hazard Flammable Skin Irritant	Poison B Unknown	Radiological			urn To	Client	Disposal By La	h	ned longer (nan 1 chive For	Months
Deliverable Requested: I, II, III, IV, Other (specify)			Sı	pecial In	struction	ns/06 Requireme	ents:	, , ,	11140 1 01	WORUS
Empty Kit Relinquisher by	Date:		Time	:			Method of	Shipment:		
Relinquished by:	Date Timy.	145 Compa	ny 11/1	Receive	ed by:			Date/Time:		Company
Relinquished by:	Date/Time:	Compai	ny	Receive	ed by:			Date/Time:		Company
Relinquished by:	Date/Time:	Compar	ny	Receive	ed by:			Date/Time:		Company
Custody Seals Intact: Custody Seal No.:				Cooler Temperature(s) C and Other Remarks						
Δ Yes Δ No				Cooler	emperati	re(s) C and Other R	emarks			

301 Alpha Drive RIDC Park Pittsburgh, PA 15238 Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

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Environment Testing America

Client Information	Sampler: Au	do	Feild		PM; lussy,	Jill L		Carrier Trackin	g No(s):	GOC No: 180-83959-141	17 1
Client Contact: Ms. Shwetha Sridharan	Phone:	1	0186	E-M		esv@	et.eurofinsus.com	State of Origin:	yloud	Page: Page 1 of 5	
Company: ARCADIS U.S., Inc.		-	PWSID:	John.	1	39(4)		-	year	Job#:	
Address:	Due Date Request	ed:	1	1	10		Analysi	s Requested		Preservation Co	las.
7550 Teague Road Suite 210 City:	TAT Requested (d		ndard		-11	ш				A - HCL	M - Hexane
Hanover	TAT Requested (d		mal		111	и		1 1 1 1		B - NaOH C - Zn Acetate	N - None O - AsNaO2
State, Zip: MD, 21076	Compliance Project				-8111	ш				D - Nitric Acid E - NaHSQ4	P - Na2O4S Q - Na2SO3
Phone: 302-897-8993(Tel)	PO#:				ш	10	3			F - MeOH G - Amchlor	R - Na2S2O3 S - H2SO4
Email:	30005455.0002 WO #:		_		-12	<			1 1 1 1	H - Ascorbic Acid	T - TSP Dodecahydrate U - Acetone
shwetha.sridharan@arcadis.com Project Name:	30114618 Project #:				- 5 - 8		9			J - DI Water K - EDTA	V - MCAA W - pH 4-5
Cytec Havre de Grace MD	18017987				e (Yes				containers	L - EDA	Y - Trizma Z - other (specify)
Site: Maryland	SSOW#:				Samp				مر دوا	Other:	
7		Sample	Sample Type (C=comp,	Matrix (W=water, S=solid, O=waste/oil,	Filtered	787			al Wumber		
Sample Identification	Sample Date	Time		BT=Tissue, A=Ak	1	4		1-1-1-1	Total	Special In	structions/Note:
MW 14 (091422)	9/14/22	0925		ition Code	1	7	2		X		
the state of the s	1111		G		11/2	$\overline{}$	3	+++++			
	9/14/22		G	W	1	2					
MW 13D (0914 ZZ)	9/14/22	1055	G	W	4	_	3			-	
MW 12D (091422)	9/14/12	1125	G	-40	22	49				MS/1	45/7
MW 125 (091422)	9/14/22	1115	6	W	140	L	3				
MW 280 (0914 22)	9/14/22	-1105	6	end	12 1	2:	3				
MW 25 I (091422)	9/14/23	1140	6	w	C-12	- 3	3	9-1			
MW-41091422	9/14/23	1150	6	w	08	_	3				
MW-6I(091422)	9/14/22	1200	G	4	va	_	3				
MU85 (091422)	1/14/22	1030	G	w	= 1	2 3					
MW8D (091422)	1/14/22	1040	6	w	41	43					
Possible Hazard Identification					S	amp	le Disposal (A fee may	be assessed if s	amples are retaine	ed longer than 1	month)
Non-Hazard Flammable Skin Irritant P Deliverable Requested: I, II, III, IV, Other (specify)	oison B Unkn	own F	Radiologica	1			Return To Client al Instructions/QC Requi	Disposal by L	ab Arch	ive For	Months
		0 :					ar mstructions/QC Requi				
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Relinquished by:	Date/Time:			Company		Re	ceived by:		Date/Time:		Company
Relinquished by:	Date/Time:			Company		Re	ceived by:		Dare/Time		Company
Custody Seals Intact: Custody Seal No : Δ Yes Δ No	4					Co	oler Temperature(s) °C and O	ther Remarks:			

301 Alpha Drive RIDC Park Pittsburgh, PA 15238 Phone: 412-963-7058 Fax: 4

Chain of Custody Record

🚓 eurofins

Environn ent Testing America

Client Information	Sampler:	du F	Eild	Co	PM: olussy, J	ill L				Ca	mier Track	ng No(s):		COC No: 180-83959-141	17.3
Client Contact: Ms. Shwetha Sridharan	Phone:	25	4018		Mail: I.Coluss		virofi.			St	ate of Origi		1	Page:	17.5
Company:	1 1 12	30	PWSID:	9 1311	Coluss	ушег.	SUIOIII	isus.cc	וווכ		Ma	14/1	end	Page 3 of 5	
ARCADIS U.S., Inc.	- To	_							Analysis	Requ	ested			300 #.	
7550 Teague Road Suite 210	Due Date Request	ed: <7	tanda	-1								JUL		Preservation Co	des:
Dity:	TAT Requested (da	ays):	1	1	- 110	11	W	3			11.7	11 1		A - HCL	M - Hexane N - None
Hanover State, Zip:		No	cma.	/	ш		4		7		1 - 1	1 1		B - NaOH C - Zn Acetate	O - AsNaO2
MD, 21076	Compliance Project				- 100	1 8	2	17 8				111		D - Nitric Acid E - NaHSO4	P - Na2O4\$ Q - Na2SO3
Phone:	PO #:	_		_	-100	ш	3	3	1	1 1	1.1			F - MeOH	R - Na2S2O3 S - H2SO4
302-897-8993(Tel) ≘mail:	30005455.0002				2		50	3 >		1 1	1 1		1 1	G - Amchlor H - Ascorbic Acid	T - TSP Dodecahydra
shwetha.sridharan@arcadis.com	WO #: 30114618				5 4		(Total	0		1111		1.1	I - Ice J - DI Water	U - Acetone V - MCAA
Project Name:	Project #:			_		260P	7	in F		1 1	1.1		8	K - EDTA	W - pH 4-5 Y - Trizma
Cytec Havre de Grace MD	18017987				e (Yes	3	4	'd 6		111	11 1			L - EDA	Z - other (specify)
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		Sample	(C=comp,	S=solid, O=waste/oil,	8/8	13	300	0 0	10		1 1		Total Num		
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Possible Hazard Identification					Şa	mple L	Dispo	sal (A	fee may	be asse	ssed if	amples a	re retair	ned longer than 1	month)
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Custody Seals Intact: Custody Seal No.:			-						°C and Oth						

301 Alpha Drive RIDC Park Pittsburgh, PA 15238 Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

💸 eurofins

Environment Testing America

Client Information	Sampler:				ab PM: Colussy,	Jill L				Carrier Trackir	g No(s):	- +	COC No: 180-83959-1411	7.4
Client Contact: Ms. Shwetha Sridharan	Phone:				-Mail: ill.Colus:	sy@e	t.eurofins	us.com	5	State of Origin			Page: Page 4 of 5	
Company: ARCADIS U.S., Inc.			PWSID						lysis Requ	uested			Job #:	
Address: 7550 Teague Road Suite 210	Due Date Request	ed:					1-1-						Preservation Cod	
City: Hanover	TAT Requested (da	ays):			111	н				Ш			A - HCL B - NaOH C - Zn Acetate	M - Hexane N - None O - AsNaO2
State, Zip: MD, 21076	Compliance Project	ct: Δ Yes	ΔNo		-111	L							D - Nitric Acid E - NaHSO4	P - Na2O4S Q - Na2SO3 R - Na2S2O3
Phone: 302-897-8993(Tel)	PO #: 30005455.0002				ි 	1							F - MeOH G - Amchlor H - Ascorbic Acid	S - H2SO4 T - TSP Dodecahydrate U - Acetone
Email: shwetha.sridharan@arcadis.com	WO #: 30114618				s or No)							2	I - Ice J - DI Water K - EDTA	V - MCAA W - pH 4-5
Project Name: Cytec Havre de Grace MD	Project #: 18017987				Sample es	B						containe	L - EDA	Y - Trizma Z - other (specify)
Site: Pennsylvania	SSOW#:				Samp	1						03 50	Other:	
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Sample Identification	Sample Date	Time	G=grab) Preserva	etion Code	iAir) &							N. C.	Special In	structions/Note:
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Deliverable Requested: I, II, III, IV, Other (specify)							Instruction	ons/QC i	Requirement					
Empty Kit Relinquished by:		Date:			Time	_				Method o	of Shipment:			
Relinquished by:	Date/Time:			Company		Red	ceived by:				Date/Time			Company
Relinquished by:	Date/Time:			Company		Red	eived by:				Date/Time:			Company
Relinquished by:	Date/Time:			Company		Red	eived by:				Date/Time:			Company
Custody Seal No Δ Yes Δ No						Cod	oler Tempera	ture(s) °C	and Other Rem	arks:				

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	Email To:	ction Info/A	lharan	ocsea	dis.	con	** Pr (6) m	ethanol	, (7) sodii	um bisul	ic acid, (2) fate, (8) so TSP, (U) L	odium	thiosul	fate, (9) hexan	ric acid, (4) ie, (A) ascoi	sodium hydroxide, (5) zinc acetate, bic acid, (B) ammonium sulfate,
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6	9/15	0830				3	3		-	-	4			-	-	-	
G	9/15	0900				3	3			-	-	-	-	-			
6	9/15	0910				3	3	-		-		_					
G	9/15	0930				3	3			-						-	
B	9/15	0950				3	3										
6	9/15	1045				3	3								-		
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Date	e/Time:		Received by	//Company	/: (Signat	ure)		ı	Date/Tin	ne:		PN PB	4.				Non Conformance(s): Page: YES / NO of:

Appendix B

System O&M Laboratory Analytical Reports



Environment Testing America

ANALYTICAL REPORT

Eurofins Pittsburgh 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 Tel: (412)963-7058

Laboratory Job ID: 180-132389-1

Client Project/Site: Cytec Havre de Grace MD

For:

ARCADIS U.S., Inc. 7550 Teague Road Suite 210 Hanover, Maryland 21076

Attn: Ms. Shwetha Sridharan



Authorized for release by: 1/26/2022 4:47:45 PM

Jill Colussy, Project Manager I (412)963-2444

Jill.Colussy@Eurofinset.com

.....LINKS

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Total Access

Have a Question?



Visit us at:

www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

PA Lab ID: 02-00416

Client: ARCADIS U.S., Inc. Project/Site: Cytec Havre de Grace MD Laboratory Job ID: 180-132389-1

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Case Narrative

Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Job ID: 180-132389-1

Job ID: 180-132389-1

Laboratory: Eurofins Pittsburgh

Narrative

Job Narrative 180-132389-1

Receipt

The samples were received on 1/14/2022 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.0° C.

GC/MS VOA

Due to the concentration of target compounds detected. samples EW-1 (11222) (180-132389-1), EW-2 (11222) (180-132389-2) and EFFLUENT (11222) (180-132389-4) were analyzed at a dilution. Elevated reporting limits (RLs) are provided.

The laboratory control sample (LCS) for analytical batch 180-385256 recovered outside control limits for the following analytes: Acrylonitrile, Bromoform and Dibromochloromethane. A low-level LCS (LLCS), spiked at the reporting limit (RL), was prepared with this batch. The affected target analytes recovered within acceptance limits; therefore, the LLCS demonstrates the analytical system had sufficient sensitivity to detect the compounds had they been present. Since the affected target compounds were not detected in the samples, the data have been reported and qualified.

Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 180-132389-1

Project/Site: Cytec Havre de Grace MD

Qualifiers

GC/MS VOA

Qualifier **Qualifier Description**

LCS and/or LCSD is outside acceptance limits, low biased.

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery **CFL** Contains Free Liquid CFU Colony Forming Unit CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

Detection Limit (DoD/DOE) DΙ

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

Decision Level Concentration (Radiochemistry) DLC

EDL Estimated Detection Limit (Dioxin) LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level" MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit MLMinimum Level (Dioxin) Most Probable Number MPN MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

PQL **Practical Quantitation Limit**

PRES Presumptive QC **Quality Control**

Relative Error Ratio (Radiochemistry) RER

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin) Toxicity Equivalent Quotient (Dioxin) **TEQ**

TNTC Too Numerous To Count

Page 4 of 18

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 180-132389-1

Project/Site: Cytec Havre de Grace MD

Laboratory: Eurofins Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-22
California	State	2891	04-30-22
Connecticut	State	PH-0688	09-30-22
Florida	NELAP	E871008	06-30-22
Georgia	State	PA 02-00416	04-30-22
Illinois	NELAP	004375	06-30-22
Kansas	NELAP	E-10350	01-31-22
Kentucky (UST)	State	162013	04-30-22
Kentucky (WW)	State	KY98043	12-31-22
Louisiana	NELAP	04041	06-30-22
Maine	State	PA00164	03-06-22
Minnesota	NELAP	042-999-482	12-31-22
Nevada	State	PA00164	08-31-22
New Hampshire	NELAP	2030	04-05-22
New Jersey	NELAP	PA005	06-30-22
New York	NELAP	11182	04-02-22
North Carolina (WW/SW)	State	434	12-31-22
North Dakota	State	R-227	04-30-22
Oregon	NELAP	PA-2151	02-06-22
Pennsylvania	NELAP	02-00416	04-30-22
Rhode Island	State	LAO00362	12-31-21 *
South Carolina	State	89014	04-30-22
Texas	NELAP	T104704528	03-31-22
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-22
√irginia	NELAP	10043	09-15-22
West Virginia DEP	State	142	01-31-23
Wisconsin	State	998027800	08-31-22

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 $^{{}^{\}star}\operatorname{Accreditation/Certification\ renewal\ pending\ -\ accreditation/certification\ considered\ valid}.$

Sample Summary

Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-132389-1	EW-1 (11222)	Water	01/12/22 12:05	01/14/22 09:30
180-132389-2	EW-2 (11222)	Water	01/12/22 12:10	01/14/22 09:30
180-132389-3	MW-10D (11222)	Water	01/12/22 12:15	01/14/22 09:30
180-132389-4	EFFLUENT (11222)	Water	01/12/22 12:20	01/14/22 09:30
180-132389-5	TRIP BLANK	Water	01/12/22 00:00	01/14/22 09:30

1

Job ID: 180-132389-1

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Method Summary

Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

 Method
 Method Description
 Protocol
 Laboratory

 EPA 624
 Volatile Organic Compounds (GC/MS)
 40CFR136A
 TAL PIT

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

Laboratory References:

TAL PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Job ID: 180-132389-1

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Job ID: 180-132389-1

Project/Site: Cytec Havre de Grace MD

Client Sample ID: EW-1 (11222)

Client: ARCADIS U.S., Inc.

Lab Sample ID: 180-132389-1 Date Collected: 01/12/22 12:05 Date Received: 01/14/22 09:30

Matrix: Water

Batch Dil Batch Batch Initial Final Prepared Method Factor Number or Analyzed **Prep Type** Type Run **Amount** Amount Analyst Lab EPA 624 385256 01/15/22 18:51 PJJ TAL PIT Total/NA Analysis 40 5 mL 5 mL

Instrument ID: CHHP6

Client Sample ID: EW-2 (11222) Lab Sample ID: 180-132389-2

Matrix: Water

Date Collected: 01/12/22 12:10 Date Received: 01/14/22 09:30

Batch Batch Dil Initial Final Batch Prepared Method Amount Amount Number or Analyzed **Prep Type** Type Run **Factor Analyst** Lab Total/NA Analysis **EPA 624** 5000 5 mL 385256 01/15/22 17:20 PJJ TAL PIT 5 mL Instrument ID: CHHP6

Client Sample ID: MW-10D (11222) Lab Sample ID: 180-132389-3

Matrix: Water

Date Collected: 01/12/22 12:15

Date Received: 01/14/22 09:30

Batch Batch Dil Initial Final Batch **Prepared** Method or Analyzed **Prep Type** Type Run **Factor Amount** Amount Number **Analyst** Lab 385256 Total/NA Analysis EPA 624 5 mL 5 mL 01/15/22 18:21 PJJ TAL PIT Instrument ID: CHHP6

Client Sample ID: EFFLUENT (11222) Lab Sample ID: 180-132389-4

Date Collected: 01/12/22 12:20 **Matrix: Water**

Date Received: 01/14/22 09:30

Batch Batch Dil Initial Final **Batch Prepared** Method **Amount** Number **Prep Type** Type Run **Factor** Amount or Analyzed Analyst Lab Total/NA 385256 01/15/22 17:50 PJJ Analysis **EPA 624** 2500 5 mL 5 mL **TAL PIT** Instrument ID: CHHP6

Client Sample ID: TRIP BLANK Lab Sample ID: 180-132389-5

Date Collected: 01/12/22 00:00 **Matrix: Water**

Date Received: 01/14/22 09:30

Batch Batch Dil Initial Final Batch **Prepared** Method Factor Amount Amount Number or Analyzed **Prep Type** Type Run Analyst Lab 385256 01/15/22 16:18 PJJ TAL PIT Total/NA Analysis **EPA 624** 5 mL 5 mL Instrument ID: CHHP6

Laboratory References:

TAL PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PIT

Batch Type: Analysis PJJ = Patrick Journet

Eurofins Pittsburgh

Project/Site: Cytec Havre de Grace MD Client Sample ID: EW-1 (11222)

Date Received: 01/14/22 09:30

Client: ARCADIS U.S., Inc.

Lab Sample ID: 180-132389-1 Date Collected: 01/12/22 12:05

Matrix: Water

Method: EPA 624 - Volatile Organic Compounds (GC/MS) Result Qualifier **MDL** Unit Analyte RL D Prepared Analyzed Dil Fac 1,1,1-Trichloroethane ND 40 24 ug/L 01/15/22 18:51 40 ND 40 1,1,2,2-Tetrachloroethane 24 ug/L 01/15/22 18:51 40 1,1,2-Trichloroethane ND 40 18 ug/L 01/15/22 18:51 40 40 1,1-Dichloroethane ND 12 ug/L 01/15/22 18:51 40 1,1-Dichloroethene ND 40 22 ug/L 01/15/22 18:51 40 1,2-Dichloroethane 350 40 23 ug/L 01/15/22 18:51 40 1,2-Dichloropropane ND 40 ug/L 01/15/22 18:51 40 ND 40 01/15/22 18:51 40 1,2-Dichlorobenzene 15 ug/L 1,3-Dichlorobenzene ND 40 20 ug/L 01/15/22 18:51 40 1,4-Dichlorobenzene ND 40 22 ug/L 01/15/22 18:51 40 2-Chloroethyl vinyl ether ND 80 69 ug/L 01/15/22 18:51 40 Acrolein ND 800 640 ug/L 01/15/22 18:51 40 Acrylonitrile ND 800 310 ug/L 01/15/22 18:51 40 Benzene ND 40 24 ug/L 01/15/22 18:51 40 Bromoform ND 40 39 ug/L 01/15/22 18:51 40 Bromomethane ND 40 ug/L 01/15/22 18:51 40 Carbon tetrachloride ND 40 35 ug/L 01/15/22 18:51 40 Chlorobenzene ND 40 20 ug/L 01/15/22 18:51 40 Chloroform ND 40 24 ug/L 01/15/22 18:51 40 Chloromethane ND 40 ug/L 01/15/22 18:51 40 cis-1,3-Dichloropropene ND 40 24 ug/L 01/15/22 18:51 40 Ethylbenzene ND 40 20 ug/L 01/15/22 18:51 40 40 ug/L **Methylene Chloride 56** 35 01/15/22 18:51 40 Tetrachloroethene ND 40 19 ug/L 01/15/22 18:51 40 Toluene ND 40 18 ug/L 01/15/22 18:51 40 ND trans-1,2-Dichloroethene 40 27 ug/L 01/15/22 18:51 40 trans-1,3-Dichloropropene ND 40 23 ug/L 01/15/22 18:51 40 Trichloroethene ND 40 28 ug/L 01/15/22 18:51 40 40 Vinyl chloride ND 16 ug/L 01/15/22 18:51 40 ND 40 34 ug/L 40 Dibromochloromethane 01/15/22 18:51 Bromodichloromethane ND 40 26 ug/L 01/15/22 18:51 40 Chloroethane ND 40 36 ug/L 01/15/22 18:51 40 %Recovery Qualifier Limits Prepared Dil Fac Surrogate Analyzed 28 - 163 1,2-Dichloroethane-d4 (Surr) 01/15/22 18:51 65 40 81 4-Bromofluorobenzene (Surr) 41 - 122 01/15/22 18:51 40 97

Client Sample ID: EW-2 (11222) Lab Sample ID: 180-132389-2 Date Collected: 01/12/22 12:10 **Matrix: Water**

53 - 125

59 - 168

81

Date Received: 01/14/22 09:30

Dibromofluoromethane (Surr)

Toluene-d8 (Surr)

Method: EPA 624 - Volatile	Organic Compounds (GC	:/MS)					
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND ND	5000	3000 ug/L			01/15/22 17:20	5000
1,1,2,2-Tetrachloroethane	ND	5000	3000 ug/L			01/15/22 17:20	5000
1,1,2-Trichloroethane	ND	5000	2300 ug/L			01/15/22 17:20	5000
1,1-Dichloroethane	ND	5000	1500 ug/L			01/15/22 17:20	5000
1,1-Dichloroethene	ND	5000	2800 ug/L			01/15/22 17:20	5000

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1/26/2022

01/15/22 18:51

01/15/22 18:51

40

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Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Client Sample ID: EW-2 (11222)

Date Collected: 01/12/22 12:10 Date Received: 01/14/22 09:30 Lab Sample ID: 180-132389-2

Matrix: Water

Job ID: 180-132389-1

Method: EPA 624 - Volatile Organic Compounds (GC/MS) (Continued)

86

75

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	47000		5000	2900	ug/L			01/15/22 17:20	5000
1,2-Dichloropropane	ND		5000	3300	ug/L			01/15/22 17:20	5000
1,2-Dichlorobenzene	ND		5000	1800	ug/L			01/15/22 17:20	5000
1,3-Dichlorobenzene	ND		5000	2500	ug/L			01/15/22 17:20	5000
1,4-Dichlorobenzene	ND		5000	2700	ug/L			01/15/22 17:20	5000
2-Chloroethyl vinyl ether	ND		10000	8600	ug/L			01/15/22 17:20	5000
Acrolein	ND		100000	80000	ug/L			01/15/22 17:20	5000
Acrylonitrile	ND	*-	100000	39000	ug/L			01/15/22 17:20	5000
Benzene	ND		5000	3000	ug/L			01/15/22 17:20	5000
Bromoform	ND	*_	5000	4900	ug/L			01/15/22 17:20	5000
Bromomethane	ND		5000	4400	ug/L			01/15/22 17:20	5000
Carbon tetrachloride	ND		5000	4400	ug/L			01/15/22 17:20	5000
Chlorobenzene	ND		5000	2500	ug/L			01/15/22 17:20	5000
Chloroform	3200	J	5000	3000	ug/L			01/15/22 17:20	5000
Chloromethane	ND		5000	4500	ug/L			01/15/22 17:20	5000
cis-1,3-Dichloropropene	ND		5000	3000	ug/L			01/15/22 17:20	5000
Ethylbenzene	ND		5000	2500	ug/L			01/15/22 17:20	5000
Methylene Chloride	140000		5000	4400	ug/L			01/15/22 17:20	5000
Tetrachloroethene	ND		5000	2300	ug/L			01/15/22 17:20	5000
Toluene	ND		5000	2300	ug/L			01/15/22 17:20	5000
trans-1,2-Dichloroethene	ND		5000	3400	ug/L			01/15/22 17:20	5000
trans-1,3-Dichloropropene	ND		5000	2900	ug/L			01/15/22 17:20	5000
Trichloroethene	ND		5000	3400	ug/L			01/15/22 17:20	5000
Vinyl chloride	ND		5000	2000	ug/L			01/15/22 17:20	5000
Dibromochloromethane	ND	*_	5000	4200	ug/L			01/15/22 17:20	5000
Bromodichloromethane	ND		5000	3200	ug/L			01/15/22 17:20	5000
Chloroethane	ND		5000	4500	ug/L			01/15/22 17:20	5000
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	61		28 - 163			-		01/15/22 17:20	5000
4-Bromofluorobenzene (Surr)	72		41 - 122					01/15/22 17:20	5000

Client Sample ID: MW-10D (11222)

Date Collected: 01/12/22 12:15

Dibromofluoromethane (Surr)

Toluene-d8 (Surr)

Date Received: 01/14/22 09:30

Lab Sample ID: 180-132389-3

01/15/22 17:20

01/15/22 17:20

Matrix: Water

5000

5000

Method: EPA 624 - Volatile Org	ganic Compounds (GC/I	MS)						
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	1.0	0.60	ug/L			01/15/22 18:21	1
1,1,2,2-Tetrachloroethane	ND	1.0	0.60	ug/L			01/15/22 18:21	1
1,1,2-Trichloroethane	ND	1.0	0.45	ug/L			01/15/22 18:21	1
1,1-Dichloroethane	ND	1.0	0.31	ug/L			01/15/22 18:21	1
1,1-Dichloroethene	ND	1.0	0.55	ug/L			01/15/22 18:21	1
1,2-Dichloroethane	2.1	1.0	0.57	ug/L			01/15/22 18:21	1
1,2-Dichloropropane	ND	1.0	0.66	ug/L			01/15/22 18:21	1
1,2-Dichlorobenzene	ND	1.0	0.36	ug/L			01/15/22 18:21	1
1,3-Dichlorobenzene	ND	1.0	0.50	ug/L			01/15/22 18:21	1
1,4-Dichlorobenzene	ND	1.0	0.54	ug/L			01/15/22 18:21	1

53 - 125

59 - 168

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Client: ARCADIS U.S., Inc. Job ID: 180-132389-1

Project/Site: Cytec Havre de Grace MD

Client Sample ID: MW-10D (11222)

Lab Sample ID: 180-132389-3 Date Collected: 01/12/22 12:15

Matrix: Water Date Received: 01/14/22 09:30

Method: EPA 624 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloroethyl vinyl ether	ND		2.0	1.7	ug/L			01/15/22 18:21	1
Acrolein	ND		20	16	ug/L			01/15/22 18:21	1
Acrylonitrile	ND	*_	20	7.8	ug/L			01/15/22 18:21	1
Benzene	ND		1.0	0.60	ug/L			01/15/22 18:21	1
Bromoform	ND	*_	1.0	0.98	ug/L			01/15/22 18:21	1
Bromomethane	ND		1.0	0.89	ug/L			01/15/22 18:21	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			01/15/22 18:21	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/15/22 18:21	1
Chloroform	ND		1.0	0.60	ug/L			01/15/22 18:21	1
Chloromethane	ND		1.0	0.90	ug/L			01/15/22 18:21	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			01/15/22 18:21	1
Ethylbenzene	ND		1.0	0.51	ug/L			01/15/22 18:21	1
Methylene Chloride	ND		1.0	0.89	ug/L			01/15/22 18:21	1
Tetrachloroethene	ND		1.0	0.47	ug/L			01/15/22 18:21	1
Toluene	ND		1.0	0.46	ug/L			01/15/22 18:21	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			01/15/22 18:21	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			01/15/22 18:21	1
Trichloroethene	1.1		1.0	0.69	ug/L			01/15/22 18:21	1
Vinyl chloride	0.50	J	1.0	0.40	ug/L			01/15/22 18:21	1
Dibromochloromethane	ND	*-	1.0	0.84	ug/L			01/15/22 18:21	1
Bromodichloromethane	ND		1.0	0.64	ug/L			01/15/22 18:21	1
Chloroethane	ND		1.0	0.90	ug/L			01/15/22 18:21	1

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	64	28 - 163		01/15/22 18:21	1
4-Bromofluorobenzene (Surr)	80	41 - 122		01/15/22 18:21	1
Toluene-d8 (Surr)	98	53 - 125		01/15/22 18:21	1
Dibromofluoromethane (Surr)	86	59 - 168		01/15/22 18:21	1

Client Sample ID: EFFLUENT (11222)

Date Collected: 01/12/22 12:20 Date Received: 01/14/22 09:30

Method: EPA 624 - Volatile Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2500	1500				01/15/22 17:50	2500
1,1,2,2-Tetrachloroethane	ND		2500	1500	ug/L			01/15/22 17:50	2500
1,1,2-Trichloroethane	ND		2500	1100	ug/L			01/15/22 17:50	2500
1,1-Dichloroethane	ND		2500	770	ug/L			01/15/22 17:50	2500
1,1-Dichloroethene	ND		2500	1400	ug/L			01/15/22 17:50	2500
1,2-Dichloroethane	13000		2500	1400	ug/L			01/15/22 17:50	2500
1,2-Dichloropropane	ND		2500	1600	ug/L			01/15/22 17:50	2500
1,2-Dichlorobenzene	ND		2500	910	ug/L			01/15/22 17:50	2500
1,3-Dichlorobenzene	ND		2500	1300	ug/L			01/15/22 17:50	2500
1,4-Dichlorobenzene	ND		2500	1400	ug/L			01/15/22 17:50	2500
2-Chloroethyl vinyl ether	ND		5000	4300	ug/L			01/15/22 17:50	2500
Acrolein	ND		50000	40000	ug/L			01/15/22 17:50	2500
Acrylonitrile	ND	*_	50000	20000	ug/L			01/15/22 17:50	2500
Benzene	ND		2500	1500	ug/L			01/15/22 17:50	2500
Bromoform	ND	*_	2500	2400	ug/L			01/15/22 17:50	2500

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1/26/2022

Lab Sample ID: 180-132389-4

Matrix: Water

Client: ARCADIS U.S., Inc.

ND

Project/Site: Cytec Havre de Grace MD

Client Sample ID: EFFLUENT (11222)

Date Collected: 01/12/22 12:20 Date Received: 01/14/22 09:30 Lab Sample ID: 180-132389-4

Matrix: Water

Job ID: 180-132389-1

Method: EPA 624 - Volatile (Organic Compounds (G	C/MS) (Conti	nued)					
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND ND	2500	2200	ug/L			01/15/22 17:50	2500
Carbon tetrachloride	ND	2500	2200	ug/L			01/15/22 17:50	2500
Chlorobenzene	ND	2500	1300	ug/L			01/15/22 17:50	2500
Chloroform	1600 J	2500	1500	ug/L			01/15/22 17:50	2500
Chloromethane	ND	2500	2200	ug/L			01/15/22 17:50	2500
cis-1,3-Dichloropropene	ND	2500	1500	ug/L			01/15/22 17:50	2500
Ethylbenzene	ND	2500	1300	ug/L			01/15/22 17:50	2500
Methylene Chloride	37000	2500	2200	ug/L			01/15/22 17:50	2500
Tetrachloroethene	ND	2500	1200	ug/L			01/15/22 17:50	2500
Toluene	ND	2500	1100	ug/L			01/15/22 17:50	2500
trans-1,2-Dichloroethene	ND	2500	1700	ug/L			01/15/22 17:50	2500
trans-1,3-Dichloropropene	ND	2500	1500	ug/L			01/15/22 17:50	2500
Trichloroethene	ND	2500	1700	ug/L			01/15/22 17:50	2500
Vinyl chloride	ND	2500	1000	ug/L			01/15/22 17:50	2500
Dibromochloromethane	ND *-	2500	2100	ug/L			01/15/22 17:50	2500
Bromodichloromethane	ND	2500	1600	ug/L			01/15/22 17:50	2500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	66		28 - 163		01/15/22 17:50	2500
4-Bromofluorobenzene (Surr)	86		41 - 122		01/15/22 17:50	2500
Toluene-d8 (Surr)	106		53 - 125		01/15/22 17:50	2500
Dibromofluoromethane (Surr)	93		59 - 168		01/15/22 17:50	2500

2500

2200 ug/L

Client Sample ID: TRIP BLANK

Date Collected: 01/12/22 00:00

Chloroethane

Lab Sample ID: 180-132389-5

01/15/22 17:50

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			01/15/22 16:18	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.60	ug/L			01/15/22 16:18	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			01/15/22 16:18	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			01/15/22 16:18	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			01/15/22 16:18	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			01/15/22 16:18	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			01/15/22 16:18	1
1,2-Dichlorobenzene	ND		1.0	0.36	ug/L			01/15/22 16:18	1
1,3-Dichlorobenzene	ND		1.0	0.50	ug/L			01/15/22 16:18	1
1,4-Dichlorobenzene	ND		1.0	0.54	ug/L			01/15/22 16:18	1
2-Chloroethyl vinyl ether	ND		2.0	1.7	ug/L			01/15/22 16:18	1
Acrolein	ND		20	16	ug/L			01/15/22 16:18	1
Acrylonitrile	ND	*_	20	7.8	ug/L			01/15/22 16:18	1
Benzene	ND		1.0	0.60	ug/L			01/15/22 16:18	1
Bromoform	ND	*-	1.0	0.98	ug/L			01/15/22 16:18	1
Bromomethane	ND		1.0	0.89	ug/L			01/15/22 16:18	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			01/15/22 16:18	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/15/22 16:18	1
Chloroform	ND		1.0	0.60	ug/L			01/15/22 16:18	1
Chloromethane	ND		1.0	0.90	ug/L			01/15/22 16:18	1

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Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 180-132389-1

Project/Site: Cytec Havre de Grace MD

Client Sample ID: TRIP BLANK

Date Received: 01/14/22 09:30

Dibromofluoromethane (Surr)

Lab Sample ID: 180-132389-5 Date Collected: 01/12/22 00:00

Matrix: Water

01/15/22 16:18

Method: EPA 624 - Volatile	•	•	, ,	•					
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			01/15/22 16:18	1
Ethylbenzene	ND		1.0	0.51	ug/L			01/15/22 16:18	1
Methylene Chloride	ND		1.0	0.89	ug/L			01/15/22 16:18	1
Tetrachloroethene	ND		1.0	0.47	ug/L			01/15/22 16:18	1
Toluene	ND		1.0	0.46	ug/L			01/15/22 16:18	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			01/15/22 16:18	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			01/15/22 16:18	1
Trichloroethene	ND		1.0	0.69	ug/L			01/15/22 16:18	1
Vinyl chloride	ND		1.0	0.40	ug/L			01/15/22 16:18	1
Dibromochloromethane	ND	*-	1.0	0.84	ug/L			01/15/22 16:18	1
Bromodichloromethane	ND		1.0	0.64	ug/L			01/15/22 16:18	1
Chloroethane	ND		1.0	0.90	ug/L			01/15/22 16:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	60		28 - 163			-		01/15/22 16:18	1
4-Bromofluorobenzene (Surr)	73		41 - 122					01/15/22 16:18	1
Toluene-d8 (Surr)	90		53 - 125					01/15/22 16:18	1

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Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Method: EPA 624 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 180-385256/7

Matrix: Water

Analysis Batch: 385256

Client Sample ID: Method Blank

Job ID: 180-132389-1

Prep Type: Total/NA

-	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			01/15/22 13:46	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.60	ug/L			01/15/22 13:46	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			01/15/22 13:46	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			01/15/22 13:46	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			01/15/22 13:46	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			01/15/22 13:46	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			01/15/22 13:46	1
1,2-Dichlorobenzene	ND		1.0	0.36	ug/L			01/15/22 13:46	1
1,3-Dichlorobenzene	ND		1.0	0.50	ug/L			01/15/22 13:46	1
1,4-Dichlorobenzene	ND		1.0	0.54	ug/L			01/15/22 13:46	1
2-Chloroethyl vinyl ether	ND		2.0	1.7	ug/L			01/15/22 13:46	1
Acrolein	ND		20	16	ug/L			01/15/22 13:46	1
Acrylonitrile	ND		20	7.8	ug/L			01/15/22 13:46	1
Benzene	ND		1.0	0.60	ug/L			01/15/22 13:46	1
Bromoform	ND		1.0	0.98	ug/L			01/15/22 13:46	1
Bromomethane	ND		1.0	0.89	ug/L			01/15/22 13:46	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			01/15/22 13:46	1
Chlorobenzene	ND		1.0	0.50	ug/L			01/15/22 13:46	1
Chloroform	ND		1.0	0.60	ug/L			01/15/22 13:46	1
Chloromethane	ND		1.0	0.90	ug/L			01/15/22 13:46	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			01/15/22 13:46	1
Ethylbenzene	ND		1.0	0.51	ug/L			01/15/22 13:46	1
Methylene Chloride	ND		1.0	0.89	ug/L			01/15/22 13:46	1
Tetrachloroethene	ND		1.0	0.47	ug/L			01/15/22 13:46	1
Toluene	ND		1.0	0.46	ug/L			01/15/22 13:46	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			01/15/22 13:46	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			01/15/22 13:46	1
Trichloroethene	ND		1.0	0.69	ug/L			01/15/22 13:46	1
Vinyl chloride	ND		1.0	0.40	ug/L			01/15/22 13:46	1
Dibromochloromethane	ND		1.0	0.84	ug/L			01/15/22 13:46	1
Bromodichloromethane	ND		1.0	0.64	ug/L			01/15/22 13:46	1
Chloroethane	ND		1.0	0.90	ug/L			01/15/22 13:46	1

MB MB Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1,2-Dichloroethane-d4 (Surr) 28 - 163 01/15/22 13:46 60 4-Bromofluorobenzene (Surr) 75 41 - 122 01/15/22 13:46 53 - 125 Toluene-d8 (Surr) 91 01/15/22 13:46 77 Dibromofluoromethane (Surr) 59 - 168 01/15/22 13:46

Lab Sample ID: LCS 180-385256/3

Matrix: Water

Analysis Batch: 385256

Client Sample ID: Lab Control Sample Prep Type: Total/NA

•	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1,1-Trichloroethane	10.0	8.61		ug/L		86	70 - 130	
1,1,2,2-Tetrachloroethane	10.0	7.72		ug/L		77	60 - 140	
1,1,2-Trichloroethane	10.0	8.27		ug/L		83	70 - 130	
1,1-Dichloroethane	10.0	10.1		ug/L		101	70 - 130	

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QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 180-132389-1

Project/Site: Cytec Havre de Grace MD

Method: EPA 624 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-385256/3

Matrix: Water

Analysis Batch: 385256

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	Spike	LCS	LCS		%Rec.	
Analyte	Added	Result	Qualifier Unit	D %Rec	Limits	
1,1-Dichloroethene	10.0	12.4	ug/L	124	50 - 150	
1,2-Dichloroethane	10.0	7.57	ug/L	76	70 - 130	
1,2-Dichloropropane	10.0	9.62	ug/L	96	35 - 165	
1,2-Dichlorobenzene	10.0	10.6	ug/L	106	65 - 135	
1,3-Dichlorobenzene	10.0	11.3	ug/L	113	70 - 130	
1,4-Dichlorobenzene	10.0	10.8	ug/L	108	65 - 135	
2-Chloroethyl vinyl ether	20.0	10.8	ug/L	54	10 - 170	
Acrolein	30.0	41.3	ug/L	138	60 - 140	
Acrylonitrile	100	58.6	*- ug/L	59	60 - 140	
Benzene	10.0	11.2	ug/L	112	65 - 135	
Bromoform	10.0	6.90	*- ug/L	69	70 - 130	
Bromomethane	10.0	9.01	ug/L	90	15 - 170	
Carbon tetrachloride	10.0	8.43	ug/L	84	70 - 130	
Chlorobenzene	10.0	10.7	ug/L	107	65 - 135	
Chloroform	10.0	9.75	ug/L	97	70 - 135	
Chloromethane	10.0	8.06	ug/L	81	10 - 170	
cis-1,3-Dichloropropene	10.0	10.8	ug/L	108	25 - 170	
Ethylbenzene	10.0	11.6	ug/L	116	60 - 140	
Methylene Chloride	10.0	11.0	ug/L	110	60 - 140	
Tetrachloroethene	10.0	10.1	ug/L	101	70 - 130	
Toluene	10.0	10.9	ug/L	109	70 - 130	
trans-1,2-Dichloroethene	10.0	11.0	ug/L	110	70 - 130	
trans-1,3-Dichloropropene	10.0	7.84	ug/L	78	50 - 150	
Trichloroethene	10.0	11.2	ug/L	112	65 - 135	
Vinyl chloride	10.0	9.80	ug/L	98	10 - 170	
Dibromochloromethane	10.0	6.90	*- ug/L	69	70 - 135	
Bromodichloromethane	10.0	8.31	ug/L	83	65 - 135	
Chloroethane	10.0	9.91	ug/L	99	40 - 160	
			_			

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	62		28 - 163
4-Bromofluorobenzene (Surr)	83		41 - 122
Toluene-d8 (Surr)	81		53 - 125
Dibromofluoromethane (Surr)	84		59 - 168

QC Association Summary

Client: ARCADIS U.S., Inc. Job ID: 180-132389-1

Project/Site: Cytec Havre de Grace MD

GC/MS VOA

Analysis Batch: 385256

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-132389-1	EW-1 (11222)	Total/NA	Water	EPA 624	
180-132389-2	EW-2 (11222)	Total/NA	Water	EPA 624	
180-132389-3	MW-10D (11222)	Total/NA	Water	EPA 624	
180-132389-4	EFFLUENT (11222)	Total/NA	Water	EPA 624	
180-132389-5	TRIP BLANK	Total/NA	Water	EPA 624	
MB 180-385256/7	Method Blank	Total/NA	Water	EPA 624	
LCS 180-385256/3	Lab Control Sample	Total/NA	Water	EPA 624	

Baltimore #201 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

🔆 eurofins

Environment Testing America

Client Information	D. Kroner J. Bukov	Lab PM: Colussy, Jill L	Carrier Tracking No(s):	COC No: 180-77576-14808.1	
Client Contact: Ms. Shwetha Sridharan	Phone: 443-936-9029	E-Mail: Jill.Colussy@Eurofinset.com	State of Origin:	Page: Page 1 of 1	
Company:	PWSID:		usis Requested	Job #:	
ARCADIS U.S., Inc. Address:	Due Date Requested:	Analy	ysis Requested	Preservation Codes:	
7550 Teague Road Suite 210				A - HCL M - Hexane	
City: Hanover	TAT Requested (days):			B - NaOH N - None C - Zn Acetate O - AsNaO2	
State, Zip: MD, 21076	Compliance Project: A Yes A No			D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3	
Phone:	PO#:			F - MeOH R - Na2S2O3 G - Amchlor S - H2SO4	
302-897-8993(Tel)	30005455.0002.			H - Ascorbic Acid T - TSP Dodecahydrate	
Email: shwetha.sridharan@arcadis.com	WO #:	2009		I - Ice U - Acetone , J - DI Water V - MCAA	
Project Name:	Project #:	ي بيارة الح		K - EDTA W - pH 4-5 L - EDA Z - other (specify)	
Cytec Havre de Grace MD Site:	18017987 SSOW#:	alge of a		Other:	
Pennsylvania	1	Sample (NB (You		5	
	Sample	Matrix		Special Instructions/Note:	
	Туре	(Winnester, Sesolid, H. E. C. 2			
Sample Identification	Sample Date (C=comp, G=grab)	O=waste/oil,		Sancial Instructions (Nata)	
Sample Identification	Preservati	ion Code: XXA A/		Special Instructions/Note:	
FW-1(112222)	1/12/242/205 6	W MN 3 3			
FW-2(112222)	1112/242/210 G	W WW 3 3			
MW100(112202)	1112/212/12/5 6	W WW 3 3			
Efflicent (112232)	1/12/2/12/20 G	W MN 3 3			
Trip Blank		w MN 22			
				and the last	
			180-132389 Chain of Custody	1001 10119 1011 1091	
			- 100 102000 Onlain of Odstody		
Possible Hazard Identification		Sample Disposal (A fee i	may be assessed if samples are retai	ned longer than 1 month)	
Non-Hazard Flammable Skin Irritant	Poison B Unknown Radiological	Return To Client		chive For Months	
Deliverable Requested: I, II, III, IV, Other (specify)		Special Instructions/QC Re	equirements:		
Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Religioushed by San	Date/Time: 1/12/21 1545	Company Received by:	Date/Time: 1 /19 /2-2	1015 Company Bell	
Relinquished by:		Received by:	Date/Time:	Company	
Relinquished by:		Company Received by:	Date/Time:	9130 Company	
				/ / ///	

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 180-132389-1

Login Number: 132389 List Source: Eurofins Pittsburgh

List Number: 1

Creator: Watson, Debbie

Creator. Watson, Debbie		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

Eurofins Pittsburgh 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 Tel: (412)963-7058

Laboratory Job ID: 180-137972-1

Client Project/Site: Cytec Havre de Grace MD

For:

ARCADIS U.S., Inc. 7550 Teague Road Suite 210 Hanover, Maryland 21076

Attn: Ms. Shwetha Sridharan

Josh

Authorized for release by: 6/2/2022 12:10:34 PM

Jill Colussy, Project Manager I

(412)963-2444

Jill.Colussy@et.eurofinsus.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

PA Lab ID: 02-00416



Client: ARCADIS U.S., Inc. Project/Site: Cytec Havre de Grace MD Laboratory Job ID: 180-137972-1

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Case Narrative

Client: ARCADIS U.S., Inc.

Job ID: 180-137972-1 Project/Site: Cytec Havre de Grace MD

Job ID: 180-137972-1

Laboratory: Eurofins Pittsburgh

Narrative

Job Narrative 180-137972-1

Receipt

The samples were received on 5/11/2022 9:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.8° C.

GC/MS VOA

Due to the concentration of target compounds detected, samples EW-1 (051022) (180-137972-1), EFFLUENT (051022) (180-137972-3) and POTW (051022) (180-137972-4), were analyzed at a dilution. Elevated reporting limits (RLs) are provided.

The laboratory control sample (LCS) for batch 180-398499 recovered outside control limits for 1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane, Acrylonitrile and Bromoform. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

GC/MS Semi VOA

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 180-137972-1

Project/Site: Cytec Havre de Grace MD

Qualifiers

GC/MS VOA

Qualifier Qualifier Description

*+ LCS and/or LCSD is outside acceptance limits, high biased.

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier Qualifier Description

F1 MS and/or MSD recovery exceeds control limits.

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier Qualifier Description

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier Qualifier Description

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Eisted under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
CFU Colony Forming Unit
CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
MPN Most Probable Number
MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive
QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

Eurofins Pittsburgh

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Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 180-137972-1

Project/Site: Cytec Havre de Grace MD

Laboratory: Eurofins Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-22
California	State	2891	04-30-22 *
Connecticut	State	PH-0688	09-30-22
Florida	NELAP	E871008	06-30-22
Georgia	State	PA 02-00416	04-30-23
Illinois	NELAP	004375	06-30-22
Kansas	NELAP	E-10350	03-31-23
Kentucky (UST)	State	162013	04-30-22 *
Kentucky (WW)	State	KY98043	12-31-22
Louisiana	NELAP	04041	06-30-22
Maine	State	PA00164	03-06-24
Minnesota	NELAP	042-999-482	12-31-22
Nevada	State	PA00164	08-31-22
New Hampshire	NELAP	2030	04-04-23
New Jersey	NELAP	PA005	06-30-23
New York	NELAP	11182	04-01-23
North Carolina (WW/SW)	State	434	12-31-22
North Dakota	State	R-227	04-30-22 *
Oregon	NELAP	PA-2151	02-07-23
Pennsylvania	NELAP	02-00416	04-30-23
Rhode Island	State	LAO00362	12-31-21 *
South Carolina	State	89014	06-30-22
Texas	NELAP	T104704528	03-31-23
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-22 *
Virginia	NELAP	10043	09-14-22
West Virginia DEP	State	142	01-31-23
Wisconsin	State	998027800	08-31-22

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 $^{{}^{\}star}\operatorname{Accreditation/Certification\ renewal\ pending\ -\ accreditation/certification\ considered\ valid}.$

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Sample Summary

Client: ARCADIS U.S., Inc. Job ID: 180-137972-1

Client: ARCADIS U.S., Inc. Project/Site: Cytec Havre de Grace MD

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-137972-1	EW-1 (051022)	Water	05/10/22 10:30	05/11/22 09:00
180-137972-2	MW-10D (051022)	Water	05/10/22 10:35	05/11/22 09:00
180-137972-3	EFFLUENT (051022)	Water	05/10/22 10:40	05/11/22 09:00
180-137972-4	POTW (051022)	Water	05/10/22 11:00	05/11/22 09:00
180-137972-5	TRIP BLANK	Water	05/10/22 00:00	05/11/22 09:00

Method Summary

Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Method **Method Description** Protocol Laboratory TAL PIT EPA 624.1 Volatile Organic Compounds (GC/MS) 40CFR136A 40 CFR 761 EPA 625.1 Semivolatile Organic Compounds (GC/MS) **TAL PIT** EPA 200.7 Rev 4 Metals (ICP) **EPA TAL PIT** EPA 245.1 Rev. Mercury (CVAA) EPA TAL PIT SM 4500CN E Total Cyanide SM TAL PIT 200.7 Preparation, Total Recoverable Metals EPA TAL PIT Preparation, Mercury 245.1 EPA TAL PIT 625 Liquid-Liquid Extraction 40CFR136A TAL PIT SM 4500 CN C Cyanide, Distillation SM **TAL PIT**

Protocol References:

40 CFR 761 = Toxic Substances Control Act (TSCA)

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

TAL PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Job ID: 180-137972-1

Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Client Sample ID: EW-1 (051022)

Date Collected: 05/10/22 10:30 Date Received: 05/11/22 09:00 Lab Sample ID: 180-137972-1

Matrix: Water

Job ID: 180-137972-1

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 624.1		50	5 mL	5 mL	398499	05/12/22 14:57	SW1	TAL PIT
	Inetrumen	TID: CHHP6								

Client Sample ID: MW-10D (051022)

Date Collected: 05/10/22 10:35 Date Received: 05/11/22 09:00 Lab Sample ID: 180-137972-2

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 624.1		1	5 mL	5 mL	398499	05/12/22 15:23	SW1	TAL PIT
	Instrumen	t ID: CHHP6								

Client Sample ID: EFFLUENT (051022)

Date Collected: 05/10/22 10:40

Date Received: 05/11/22 09:00

Lab Sample ID: 180-137972-3

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 624.1		5	5 mL	5 mL	398499	05/12/22 13:14	SW1	TAL PIT
	Instrumer	it ID: CHHP6								

Client Sample ID: POTW (051022)

Date Collected: 05/10/22 11:00

Date Received: 05/11/22 09:00

Lab Sample ID: 180-137972-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumer	EPA 624.1 at ID: CHHP6		5	5 mL	5 mL	398499	05/12/22 14:06	SW1	TAL PIT
Total/NA Total/NA	Prep Analysis Instrumer	625 EPA 625.1 at ID: CH733		1	240 mL 1 mL	250 uL 1 mL	399113 399580	05/17/22 14:55 05/21/22 16:11		TAL PIT
Total Recoverable Total Recoverable	Prep Analysis Instrumer	200.7 EPA 200.7 Rev 4 at ID: C		1	25 mL	25 mL	399223 399442	05/18/22 13:03 05/19/22 23:55		TAL PIT
Total/NA Total/NA	Prep Analysis Instrumer	245.1 EPA 245.1 Rev. at ID: HGY		1	50 mL	50 mL	400485 400599	06/01/22 07:25 06/01/22 18:43		TAL PIT
Total/NA Total/NA	Prep Analysis Instrumer	SM 4500 CN C SM 4500CN E at ID: SEAL1		1	6 mL	6 mL	398646 399126	05/17/22 08:00 05/17/22 13:50		TAL PIT

Client Sample ID: TRIP BLANK

Date Collected: 05/10/22 00:00

Date Received: 05/11/22 09:00

Lab Sample ID: 180-137972-5

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 624.1		1	5 mL	5 mL	398499	05/12/22 13:40	SW1	TAL PIT
	Instrumer	t ID: CHHP6								

Eurofins Pittsburgh

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Lab Chronicle

Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Laboratory References:

TAL PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PIT

Batch Type: Prep

BJT = Bill Trout

CMR = Carl Reagle

NAF = Nicholas Frankos

RJR = Ron Rosenbaum

Batch Type: Analysis

CMR = Carl Reagle

RJG = Rob Good

RJR = Ron Rosenbaum

SW1 = Sunan Wang-un

VVP = Vincent Piccolino

Job ID: 180-137972-1

Project/Site: Cytec Havre de Grace MD Client Sample ID: EW-1 (051022)

Lab Sample ID: 180-137972-1 Date Collected: 05/10/22 10:30

Matrix: Water

Date Received: 05/11/22 09:00

Client: ARCADIS U.S., Inc.

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	30	ug/L			05/12/22 14:57	50
1,1,2,2-Tetrachloroethane	ND	*+	50	30	ug/L			05/12/22 14:57	50
1,1,2-Trichloroethane	ND	*+	50	23	ug/L			05/12/22 14:57	50
1,1-Dichloroethane	ND		50	15	ug/L			05/12/22 14:57	50
1,1-Dichloroethene	ND		50	28	ug/L			05/12/22 14:57	50
1,2-Dichloroethane	670		50	29	ug/L			05/12/22 14:57	50
1,2-Dichloropropane	ND		50	33	ug/L			05/12/22 14:57	50
1,2-Dichlorobenzene	ND		50	18	ug/L			05/12/22 14:57	50
1,3-Dichlorobenzene	ND		50	25	ug/L			05/12/22 14:57	50
1,4-Dichlorobenzene	ND		50	27	ug/L			05/12/22 14:57	50
2-Chloroethyl vinyl ether	ND		100	86	ug/L			05/12/22 14:57	50
Acrolein	ND		1000	800	ug/L			05/12/22 14:57	50
Acrylonitrile	ND	*+	1000	390	ug/L			05/12/22 14:57	50
Benzene	ND		50	30	ug/L			05/12/22 14:57	50
Bromoform	ND	*+	50	49	ug/L			05/12/22 14:57	50
Bromomethane	ND		50	44	ug/L			05/12/22 14:57	50
Carbon tetrachloride	ND		50	44	ug/L			05/12/22 14:57	50
Chlorobenzene	ND		50	25	ug/L			05/12/22 14:57	50
Chloroform	ND		50	30	ug/L			05/12/22 14:57	50
Chloromethane	ND		50	45	ug/L			05/12/22 14:57	50
cis-1,3-Dichloropropene	ND		50	30	ug/L			05/12/22 14:57	50
Ethylbenzene	ND		50	25	ug/L			05/12/22 14:57	50
Methylene Chloride	ND		50	44	ug/L			05/12/22 14:57	50
Tetrachloroethene	ND		50	23	ug/L			05/12/22 14:57	50
Toluene	ND		50	23	ug/L			05/12/22 14:57	50
trans-1,2-Dichloroethene	ND		50	34	ug/L			05/12/22 14:57	50
trans-1,3-Dichloropropene	ND		50	29	ug/L			05/12/22 14:57	50
Trichloroethene	ND		50	34	ug/L			05/12/22 14:57	50
Vinyl chloride	ND		50	20	ug/L			05/12/22 14:57	50
Dibromochloromethane	ND		50	42	ug/L			05/12/22 14:57	50
Bromodichloromethane	ND		50	32	ug/L			05/12/22 14:57	50
Chloroethane	ND		50	45	ug/L			05/12/22 14:57	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
1,2-Dichloroethane-d4 (Surr)	121		28 - 163			•		05/12/22 14:57	50
4-Bromofluorobenzene (Surr)	99		41 - 122					05/12/22 14:57	50
Toluene-d8 (Surr)	87		53 - 125					05/12/22 14:57	50
Dibromofluoromethane (Surr)	103		59 - 168					05/12/22 14:57	50

Client Sample ID: MW-10D (051022)

Lab Sample ID: 180-137972-2 Date Collected: 05/10/22 10:35 **Matrix: Water**

Date Received: 05/11/22 09:00

Method: EPA 624.1 - Volatile	e Organic Compou	inds (GC/MS)						
Analyte	Result Qual	lifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND ND	1.0	0.60	ug/L			05/12/22 15:23	1
1,1,2,2-Tetrachloroethane	ND *+	1.0	0.60	ug/L			05/12/22 15:23	1
1,1,2-Trichloroethane	ND *+	1.0	0.45	ug/L			05/12/22 15:23	1
1,1-Dichloroethane	ND	1.0	0.31	ug/L			05/12/22 15:23	1
1,1-Dichloroethene	ND	1.0	0.55	ug/L			05/12/22 15:23	1

Eurofins Pittsburgh

Job ID: 180-137972-1

Client: ARCADIS U.S., Inc. Project/Site: Cytec Havre de Grace MD

Client Sample ID: MW-10D (051022)

Date Collected: 05/10/22 10:35 Date Received: 05/11/22 09:00

Lab Sample ID: 180-137972-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	MD		1.0	0.57	ug/L			05/12/22 15:23	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			05/12/22 15:23	1
1,2-Dichlorobenzene	ND		1.0	0.36	ug/L			05/12/22 15:23	1
1,3-Dichlorobenzene	ND		1.0	0.50	ug/L			05/12/22 15:23	1
1,4-Dichlorobenzene	ND		1.0	0.54	ug/L			05/12/22 15:23	1
2-Chloroethyl vinyl ether	ND		2.0	1.7	ug/L			05/12/22 15:23	1
Acrolein	ND		20	16	ug/L			05/12/22 15:23	1
Acrylonitrile	ND	*+	20	7.8	ug/L			05/12/22 15:23	1
Benzene	ND		1.0	0.60	ug/L			05/12/22 15:23	1
Bromoform	ND	*+	1.0	0.98	ug/L			05/12/22 15:23	1
Bromomethane	ND		1.0	0.89	ug/L			05/12/22 15:23	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			05/12/22 15:23	1
Chlorobenzene	ND		1.0	0.50	ug/L			05/12/22 15:23	1
Chloroform	ND		1.0	0.60	ug/L			05/12/22 15:23	1
Chloromethane	ND		1.0	0.90	ug/L			05/12/22 15:23	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			05/12/22 15:23	1
Ethylbenzene	ND		1.0	0.51	ug/L			05/12/22 15:23	1
Methylene Chloride	ND		1.0	0.89	ug/L			05/12/22 15:23	1
Tetrachloroethene	ND		1.0	0.47	ug/L			05/12/22 15:23	1
Toluene	ND		1.0	0.46	ug/L			05/12/22 15:23	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			05/12/22 15:23	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			05/12/22 15:23	1
Trichloroethene	ND		1.0	0.69	ug/L			05/12/22 15:23	1
Vinyl chloride	ND		1.0	0.40	ug/L			05/12/22 15:23	1
Dibromochloromethane	ND		1.0	0.84	ug/L			05/12/22 15:23	1
Bromodichloromethane	ND		1.0	0.64	ug/L			05/12/22 15:23	1
Chloroethane	ND		1.0	0.90	ug/L			05/12/22 15:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	120		28 - 163			-	-	05/12/22 15:23	1

Client Sample ID: EFFLUENT (051022)

98

89

105

Date Collected: 05/10/22 10:40 Date Received: 05/11/22 09:00

4-Bromofluorobenzene (Surr)

Dibromofluoromethane (Surr)

Toluene-d8 (Surr)

Lab Sample ID: 180-137972-3

05/12/22 15:23

05/12/22 15:23

05/12/22 15:23

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	3.0	ug/L			05/12/22 13:14	5
1,1,2,2-Tetrachloroethane	ND	*+	5.0	3.0	ug/L			05/12/22 13:14	5
1,1,2-Trichloroethane	ND	*+	5.0	2.3	ug/L			05/12/22 13:14	5
1,1-Dichloroethane	ND		5.0	1.5	ug/L			05/12/22 13:14	5
1,1-Dichloroethene	ND		5.0	2.8	ug/L			05/12/22 13:14	5
1,2-Dichloroethane	140		5.0	2.9	ug/L			05/12/22 13:14	5
1,2-Dichloropropane	ND		5.0	3.3	ug/L			05/12/22 13:14	5
1,2-Dichlorobenzene	ND		5.0	1.8	ug/L			05/12/22 13:14	5
1,3-Dichlorobenzene	ND		5.0	2.5	ug/L			05/12/22 13:14	5
1,4-Dichlorobenzene	ND		5.0	2.7	ug/L			05/12/22 13:14	5

41 - 122

53 - 125

59 - 168

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Client: ARCADIS U.S., Inc. Job ID: 180-137972-1 Project/Site: Cytec Havre de Grace MD

Client Sample ID: EFFLUENT (051022)

Lab Sample ID: 180-137972-3 **Matrix: Water**

Date Collected: 05/10/22 10:40 Date Received: 05/11/22 09:00

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result C	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloroethyl vinyl ether	ND ND		10	8.6	ug/L			05/12/22 13:14	5
Acrolein	ND		100	80	ug/L			05/12/22 13:14	5
Acrylonitrile	ND *-	+	100	39	ug/L			05/12/22 13:14	5
Benzene	ND		5.0	3.0	ug/L			05/12/22 13:14	5
Bromoform	ND *-	+	5.0	4.9	ug/L			05/12/22 13:14	5
Bromomethane	ND		5.0	4.4	ug/L			05/12/22 13:14	5
Carbon tetrachloride	ND		5.0	4.4	ug/L			05/12/22 13:14	5
Chlorobenzene	ND		5.0	2.5	ug/L			05/12/22 13:14	5
Chloroform	ND		5.0	3.0	ug/L			05/12/22 13:14	5
Chloromethane	ND		5.0	4.5	ug/L			05/12/22 13:14	5
cis-1,3-Dichloropropene	ND		5.0	3.0	ug/L			05/12/22 13:14	5
Ethylbenzene	ND		5.0	2.5	ug/L			05/12/22 13:14	5
Methylene Chloride	ND		5.0	4.4	ug/L			05/12/22 13:14	5
Tetrachloroethene	ND		5.0	2.3	ug/L			05/12/22 13:14	5
Toluene	ND		5.0	2.3	ug/L			05/12/22 13:14	5
trans-1,2-Dichloroethene	ND		5.0	3.4	ug/L			05/12/22 13:14	5
trans-1,3-Dichloropropene	ND		5.0	2.9	ug/L			05/12/22 13:14	5
Trichloroethene	4.1 J	 	5.0	3.4	ug/L			05/12/22 13:14	5
Vinyl chloride	ND		5.0	2.0	ug/L			05/12/22 13:14	5
Dibromochloromethane	ND		5.0	4.2	ug/L			05/12/22 13:14	5
Bromodichloromethane	ND		5.0	3.2	ug/L			05/12/22 13:14	5
Chloroethane	ND		5.0	4.5	ug/L			05/12/22 13:14	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	137		28 - 163		05/12/22 13:14	5
4-Bromofluorobenzene (Surr)	102		41 - 122		05/12/22 13:14	5
Toluene-d8 (Surr)	83		53 - 125		05/12/22 13:14	5
Dibromofluoromethane (Surr)	115		59 - 168		05/12/22 13:14	5

Client Sample ID: POTW (051022)

Date Collected: 05/10/22 11:00 Date Received: 05/11/22 09:00 Lab Sample ID: 180-137972-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	3.0	ug/L			05/12/22 14:06	5
1,1,2,2-Tetrachloroethane	ND	*+	5.0	3.0	ug/L			05/12/22 14:06	5
1,1,2-Trichloroethane	ND	*+	5.0	2.3	ug/L			05/12/22 14:06	5
1,1-Dichloroethane	ND		5.0	1.5	ug/L			05/12/22 14:06	5
1,1-Dichloroethene	ND		5.0	2.8	ug/L			05/12/22 14:06	5
1,2-Dichloroethane	130		5.0	2.9	ug/L			05/12/22 14:06	5
1,2-Dichloropropane	ND		5.0	3.3	ug/L			05/12/22 14:06	5
1,2-Dichlorobenzene	ND		5.0	1.8	ug/L			05/12/22 14:06	5
1,3-Dichlorobenzene	ND		5.0	2.5	ug/L			05/12/22 14:06	5
1,4-Dichlorobenzene	ND		5.0	2.7	ug/L			05/12/22 14:06	5
2-Chloroethyl vinyl ether	ND		10	8.6	ug/L			05/12/22 14:06	5
Acrolein	ND		100	80	ug/L			05/12/22 14:06	5
Acrylonitrile	ND	*+	100	39	ug/L			05/12/22 14:06	5
Benzene	ND		5.0	3.0	ug/L			05/12/22 14:06	5
Bromoform	ND	*+	5.0	4.9	ug/L			05/12/22 14:06	5

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Client: ARCADIS U.S., Inc. Job ID: 180-137972-1

Project/Site: Cytec Havre de Grace MD

Client Sample ID: POTW (051022)

Date Collected: 05/10/22 11:00 Date Received: 05/11/22 09:00

Lab Sample ID: 180-137972-4

Matrix: Water

Analyte	Result Q	ualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND ND	5.0	4.4	ug/L			05/12/22 14:06	5
Carbon tetrachloride	ND	5.0	4.4	ug/L			05/12/22 14:06	5
Chlorobenzene	ND	5.0	2.5	ug/L			05/12/22 14:06	5
Chloroform	ND	5.0	3.0	ug/L			05/12/22 14:06	5
Chloromethane	ND	5.0	4.5	ug/L			05/12/22 14:06	5
cis-1,3-Dichloropropene	ND	5.0	3.0	ug/L			05/12/22 14:06	5
Ethylbenzene	ND	5.0	2.5	ug/L			05/12/22 14:06	5
Methylene Chloride	ND	5.0	4.4	ug/L			05/12/22 14:06	5
Tetrachloroethene	ND	5.0	2.3	ug/L			05/12/22 14:06	5
Toluene	ND	5.0	2.3	ug/L			05/12/22 14:06	5
trans-1,2-Dichloroethene	ND	5.0	3.4	ug/L			05/12/22 14:06	5
trans-1,3-Dichloropropene	ND	5.0	2.9	ug/L			05/12/22 14:06	5
Trichloroethene	4.0 J	5.0	3.4	ug/L			05/12/22 14:06	5
Vinyl chloride	ND	5.0	2.0	ug/L			05/12/22 14:06	5
Dibromochloromethane	ND	5.0	4.2	ug/L			05/12/22 14:06	5
Bromodichloromethane	ND	5.0	3.2	ug/L			05/12/22 14:06	5
Chloroethane	ND	5.0	4.5	ug/L			05/12/22 14:06	5
O	0/5					5	A t t	D# F

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	136	28 - 163		05/12/22 14:06	5
4-Bromofluorobenzene (Surr)	101	41 - 122		05/12/22 14:06	5
Toluene-d8 (Surr)	85	53 - 125		05/12/22 14:06	5
Dibromofluoromethane (Surr)	112	59 - 168		05/12/22 14:06	5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	ND		0.20	0.068	ug/L		05/17/22 14:55	05/21/22 16:11	1
Acenaphthene	ND		0.20	0.068	ug/L		05/17/22 14:55	05/21/22 16:11	1
Anthracene	ND		0.20	0.051	ug/L		05/17/22 14:55	05/21/22 16:11	1
Benzidine	ND	F1	21	9.5	ug/L		05/17/22 14:55	05/21/22 16:11	1
Benzo[a]anthracene	ND		0.20	0.078	ug/L		05/17/22 14:55	05/21/22 16:11	1
Benzo[b]fluoranthene	ND		0.20	0.10	ug/L		05/17/22 14:55	05/21/22 16:11	1
Benzo[k]fluoranthene	ND		0.20	0.092	ug/L		05/17/22 14:55	05/21/22 16:11	1
Benzo[g,h,i]perylene	ND		0.20	0.072	ug/L		05/17/22 14:55	05/21/22 16:11	1
Benzo[a]pyrene	ND		0.20	0.055	ug/L		05/17/22 14:55	05/21/22 16:11	1
Bis(2-chloroethyl)ether	ND		0.20	0.042	ug/L		05/17/22 14:55	05/21/22 16:11	1
Bis(2-ethylhexyl) phthalate	ND		10	6.5	ug/L		05/17/22 14:55	05/21/22 16:11	1
4-Bromophenyl phenyl ether	ND		1.0	0.33	ug/L		05/17/22 14:55	05/21/22 16:11	1
Butyl benzyl phthalate	ND		1.0	0.48	ug/L		05/17/22 14:55	05/21/22 16:11	1
4-Chloro-3-methylphenol	ND		1.0	0.29	ug/L		05/17/22 14:55	05/21/22 16:11	1
2-Chloronaphthalene	ND		0.20	0.061	ug/L		05/17/22 14:55	05/21/22 16:11	1
2-Chlorophenol	ND		1.0	0.13	ug/L		05/17/22 14:55	05/21/22 16:11	1
Chrysene	ND		0.20	0.084	ug/L		05/17/22 14:55	05/21/22 16:11	1
Dibenzo(a,h)-anthracene	ND		0.20	0.075	ug/L		05/17/22 14:55	05/21/22 16:11	1
Di-n-butyl phthalate	2.1		1.0	0.77	ug/L		05/17/22 14:55	05/21/22 16:11	1
3,3'-Dichlorobenzidine	ND		1.0	0.61	ug/L		05/17/22 14:55	05/21/22 16:11	1
2,4-Dichlorophenol	ND		0.20	0.053	ug/L		05/17/22 14:55	05/21/22 16:11	1
Diethyl phthalate	ND		1.0	0.59	ug/L		05/17/22 14:55	05/21/22 16:11	1
2,4-Dimethylphenol	ND		1.0	0.17	ug/L		05/17/22 14:55	05/21/22 16:11	1
Dimethyl phthalate	ND		1.0	0.21	ug/L		05/17/22 14:55	05/21/22 16:11	1

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Phenol-d5

Silver

Zinc

Terphenyl-d14

Client Sample ID: POTW (051022)

Date Collected: 05/10/22 11:00 Date Received: 05/11/22 09:00 Lab Sample ID: 180-137972-4

Matrix: Water

Method: EPA 625.1 - Semivol Analyte		Qualifier	` RL	MDL		D	Prepared	Analyzed	Dil Fac
4,6-Dinitro-2-methylphenol	ND	<u> </u>	5.2	1.5	ug/L		05/17/22 14:55	05/21/22 16:11	
2,4-Dinitrophenol	ND		10		ug/L		05/17/22 14:55	05/21/22 16:11	1
2,4-Dinitrotoluene	ND		1.0	0.37	-		05/17/22 14:55	05/21/22 16:11	1
2,6-Dinitrotoluene	ND		1.0	0.18	ug/L		05/17/22 14:55	05/21/22 16:11	1
Di-n-octyl phthalate	ND		1.0	0.71	-		05/17/22 14:55	05/21/22 16:11	1
Fluoranthene	ND		0.20	0.063	ug/L		05/17/22 14:55	05/21/22 16:11	1
Fluorene	ND		0.20	0.072	ug/L		05/17/22 14:55	05/21/22 16:11	1
Hexachlorobenzene	ND		0.20	0.058	ug/L		05/17/22 14:55	05/21/22 16:11	1
Hexachlorobutadiene	ND		0.20	0.072	ug/L		05/17/22 14:55	05/21/22 16:11	1
Hexachlorocyclopentadiene	ND		1.0	0.52	ug/L		05/17/22 14:55	05/21/22 16:11	1
Hexachloroethane	ND		1.0	0.14	ug/L		05/17/22 14:55	05/21/22 16:11	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.089	ug/L		05/17/22 14:55	05/21/22 16:11	1
Isophorone	ND		1.0	0.20	ug/L		05/17/22 14:55	05/21/22 16:11	1
Naphthalene	ND		0.20	0.061	ug/L		05/17/22 14:55	05/21/22 16:11	1
Nitrobenzene	ND		2.1	0.52	ug/L		05/17/22 14:55	05/21/22 16:11	1
2-Nitrophenol	ND		1.0	0.20	ug/L		05/17/22 14:55	05/21/22 16:11	1
4-Nitrophenol	ND		5.2	0.98	ug/L		05/17/22 14:55	05/21/22 16:11	1
N-Nitrosodimethylamine	ND		1.0	0.070	ug/L		05/17/22 14:55	05/21/22 16:11	1
N-Nitrosodiphenylamine	ND		1.0	0.12	ug/L		05/17/22 14:55	05/21/22 16:11	1
N-Nitrosodi-n-propylamine	ND		0.20	0.074	ug/L		05/17/22 14:55	05/21/22 16:11	1
2,2'-oxybis[1-chloropropane]	ND		0.20	0.060	ug/L		05/17/22 14:55	05/21/22 16:11	1
Pentachlorophenol	ND		5.2	0.88	ug/L		05/17/22 14:55	05/21/22 16:11	1
Phenanthrene	ND		0.20	0.057	ug/L		05/17/22 14:55	05/21/22 16:11	1
Phenol	ND		1.0	0.51	ug/L		05/17/22 14:55	05/21/22 16:11	1
Pyrene	ND		0.20	0.056	ug/L		05/17/22 14:55	05/21/22 16:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.14	ug/L		05/17/22 14:55	05/21/22 16:11	1
2,4,6-Trichlorophenol	ND		1.0	0.23	ug/L		05/17/22 14:55	05/21/22 16:11	1
Bis(2-chloroethoxy)methane	ND		1.0	0.16	ug/L		05/17/22 14:55	05/21/22 16:11	1
4-Chlorophenyl phenyl ether	ND		1.0	0.23	ug/L		05/17/22 14:55	05/21/22 16:11	1
1,2-Diphenylhydrazine(as	ND		1.0	0.20	ug/L		05/17/22 14:55	05/21/22 16:11	1
Azobenzene)									
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	73		47 - 107				05/17/22 14:55	05/21/22 16:11	1
2-Fluorophenol	68		35 - 109				05/17/22 14:55	05/21/22 16:11	1
2,4,6-Tribromophenol	52		32 - 127				05/17/22 14:55	05/21/22 16:11	1
Nitrobenzene-d5	80		47 - 110				05/17/22 14:55	05/21/22 16:11	1

Method: EPA 200.7 Rev	4 - Wetals (ICP) -	iotal Recov	erabie						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.3	J	10	5.7	ug/L		05/18/22 13:03	05/19/22 23:55	1
Cadmium	ND		5.0	0.33	ug/L		05/18/22 13:03	05/19/22 23:55	1
Chromium	ND		5.0	2.6	ug/L		05/18/22 13:03	05/19/22 23:55	1
Copper	ND		25	3.9	ug/L		05/18/22 13:03	05/19/22 23:55	1
Lead	ND		10	2.3	ug/L		05/18/22 13:03	05/19/22 23:55	1
Nickel	5.7	J	40	2.1	ua/L		05/18/22 13:03	05/19/22 23:55	1

5.0

20

0.87 ug/L

3.3 ug/L

37 - 110

32 - 115

65

85

ND

6.0 J

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05/17/22 14:55 05/21/22 16:11

05/17/22 14:55 05/21/22 16:11

05/18/22 13:03 05/19/22 23:55

05/18/22 13:03 05/19/22 23:55

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Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 180-137972-1

Project/Site: Cytec Havre de Grace MD

Client Sample ID: POTW (051022)

Lab Sample ID: 180-137972-4

Date Collected: 05/10/22 11:00 **Matrix: Water** Date Received: 05/11/22 09:00

Method: EPA 245.1 Rev. - Mercury (CVAA) Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac 0.13 ug/L Mercury ND 0.20 06/01/22 07:25 06/01/22 18:43 **General Chemistry**

Analyte Result Qualifier RL MDL Unit Dil Fac Prepared Analyzed 05/17/22 08:00 05/17/22 13:50 Cyanide, Total 0.010 0.0080 mg/L 0.0091 J

Client Sample ID: TRIP BLANK Lab Sample ID: 180-137972-5

Date Collected: 05/10/22 00:00 **Matrix: Water** Date Received: 05/11/22 09:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			05/12/22 13:40	1
1,1,2,2-Tetrachloroethane	ND	*+	1.0	0.60	ug/L			05/12/22 13:40	1
1,1,2-Trichloroethane	ND	*+	1.0	0.45	ug/L			05/12/22 13:40	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			05/12/22 13:40	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			05/12/22 13:40	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			05/12/22 13:40	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			05/12/22 13:40	1
1,2-Dichlorobenzene	ND		1.0	0.36	ug/L			05/12/22 13:40	1
1,3-Dichlorobenzene	ND		1.0	0.50	ug/L			05/12/22 13:40	1
1,4-Dichlorobenzene	ND		1.0	0.54	ug/L			05/12/22 13:40	1
2-Chloroethyl vinyl ether	ND		2.0	1.7	ug/L			05/12/22 13:40	1
Acrolein	ND		20	16	ug/L			05/12/22 13:40	1
Acrylonitrile	ND	*+	20	7.8	ug/L			05/12/22 13:40	1
Benzene	ND		1.0	0.60	ug/L			05/12/22 13:40	1
Bromoform	ND	*+	1.0	0.98	ug/L			05/12/22 13:40	1
Bromomethane	ND		1.0	0.89	ug/L			05/12/22 13:40	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			05/12/22 13:40	1
Chlorobenzene	ND		1.0	0.50	ug/L			05/12/22 13:40	1
Chloroform	ND		1.0	0.60	ug/L			05/12/22 13:40	1
Chloromethane	ND		1.0	0.90	ug/L			05/12/22 13:40	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			05/12/22 13:40	1
Ethylbenzene	ND		1.0	0.51	ug/L			05/12/22 13:40	1
Methylene Chloride	ND		1.0	0.89	ug/L			05/12/22 13:40	1
Tetrachloroethene	ND		1.0	0.47	ug/L			05/12/22 13:40	1
Toluene	ND		1.0	0.46	ug/L			05/12/22 13:40	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			05/12/22 13:40	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			05/12/22 13:40	1
Trichloroethene	ND		1.0	0.69	ug/L			05/12/22 13:40	1
Vinyl chloride	ND		1.0	0.40	ug/L			05/12/22 13:40	1
Dibromochloromethane	ND		1.0	0.84	ug/L			05/12/22 13:40	1
Bromodichloromethane	ND		1.0	0.64	ug/L			05/12/22 13:40	1
Chloroethane	ND		1.0	0.90	ug/L			05/12/22 13:40	1
Surrogate	%Recovery	Qualifier	Limits			_	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	138		28 - 163			_		05/12/22 13:40	1
4-Bromofluorobenzene (Surr)	100		41 - 122					05/12/22 13:40	1
Toluene-d8 (Surr)	85		53 - 125					05/12/22 13:40	1
Dibromofluoromethane (Surr)	113		59 - 168					05/12/22 13:40	1
-									

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Client: ARCADIS U.S., Inc.

Job ID: 180-137972-1 Project/Site: Cytec Havre de Grace MD

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 180-398499/6

Matrix: Water

Analysis Batch: 398499

Client Sample ID: Method Blank

Prep Type: Total/NA

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			05/12/22 09:46	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.60	ug/L			05/12/22 09:46	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			05/12/22 09:46	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			05/12/22 09:46	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			05/12/22 09:46	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			05/12/22 09:46	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			05/12/22 09:46	1
1,2-Dichlorobenzene	ND		1.0	0.36	ug/L			05/12/22 09:46	1
1,3-Dichlorobenzene	ND		1.0	0.50	ug/L			05/12/22 09:46	1
1,4-Dichlorobenzene	ND		1.0	0.54	ug/L			05/12/22 09:46	1
2-Chloroethyl vinyl ether	ND		2.0	1.7	ug/L			05/12/22 09:46	1
Acrolein	ND		20	16	ug/L			05/12/22 09:46	1
Acrylonitrile	ND		20	7.8	ug/L			05/12/22 09:46	1
Benzene	ND		1.0	0.60	ug/L			05/12/22 09:46	1
Bromoform	ND		1.0	0.98	ug/L			05/12/22 09:46	1
Bromomethane	ND		1.0	0.89	ug/L			05/12/22 09:46	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			05/12/22 09:46	1
Chlorobenzene	ND		1.0	0.50	ug/L			05/12/22 09:46	1
Chloroform	ND		1.0	0.60	ug/L			05/12/22 09:46	1
Chloromethane	ND		1.0	0.90	ug/L			05/12/22 09:46	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			05/12/22 09:46	1
Ethylbenzene	ND		1.0	0.51	ug/L			05/12/22 09:46	1
Methylene Chloride	ND		1.0	0.89	ug/L			05/12/22 09:46	1
Tetrachloroethene	ND		1.0	0.47	ug/L			05/12/22 09:46	1
Toluene	ND		1.0	0.46	ug/L			05/12/22 09:46	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			05/12/22 09:46	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			05/12/22 09:46	1
Trichloroethene	ND		1.0	0.69	ug/L			05/12/22 09:46	1
Vinyl chloride	ND		1.0	0.40	ug/L			05/12/22 09:46	1
Dibromochloromethane	ND		1.0	0.84	ug/L			05/12/22 09:46	1
Bromodichloromethane	ND		1.0	0.64	ug/L			05/12/22 09:46	1

MB	MB

Surrogate	%Recovery	Qualifier	Limits	Prepared Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	127		28 - 163	05/12/22 09:46	1
4-Bromofluorobenzene (Surr)	105		41 - 122	05/12/22 09:46	1
Toluene-d8 (Surr)	88		53 - 125	05/12/22 09:46	1
Dibromofluoromethane (Surr)	106		59 - 168	05/12/22 09:46	1

Lab Sample ID: LCS 180-398499/4

Matrix: Water

Analysis Batch: 398499

Client Sample ID: Lab Control Sample	
Prep Type: Total/NA	

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1,1-Trichloroethane	10.0	9.76		ug/L		98	70 - 130	
1,1,2,2-Tetrachloroethane	10.0	17.6	*+	ug/L		176	60 - 140	
1,1,2-Trichloroethane	10.0	13.1	*+	ug/L		131	70 - 130	
1,1-Dichloroethane	10.0	9.06		ug/L		91	70 - 130	

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Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-398499/4

Matrix: Water

Analysis Batch: 398499

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Job ID: 180-137972-1

	Spike	LCS	LCS			%Rec	
Analyte	Added	Result	Qualifier	Unit	D %Red	Limits	
1,1-Dichloroethene	10.0	8.61		ug/L	86	50 - 150	
1,2-Dichloroethane	10.0	12.8		ug/L	128	3 70 - 130	
1,2-Dichloropropane	10.0	10.3		ug/L	103	35 - 165	
1,2-Dichlorobenzene	10.0	10.4		ug/L	104	65 - 135	
1,3-Dichlorobenzene	10.0	9.64		ug/L	96	70 - 130	
1,4-Dichlorobenzene	10.0	9.82		ug/L	98	8 65 - 135	
2-Chloroethyl vinyl ether	20.0	32.7		ug/L	164	10 - 170	
Acrolein	30.0	29.5		ug/L	98	8 60 - 140	
Acrylonitrile	100	305	*+	ug/L	305	60 - 140	
Benzene	10.0	9.29		ug/L	93	8 65 - 135	
Bromoform	10.0	15.5	*+	ug/L	155	70 - 130	
Bromomethane	10.0	5.87		ug/L	59	15 - 170	
Carbon tetrachloride	10.0	8.59		ug/L	86	70 - 130	
Chlorobenzene	10.0	9.71		ug/L	97	′ 65 - 135	
Chloroform	10.0	9.92		ug/L	99	70 - 135	
Chloromethane	10.0	9.90		ug/L	99	10 - 170	
cis-1,3-Dichloropropene	10.0	14.0		ug/L	140	25 - 170	
Ethylbenzene	10.0	9.36		ug/L	94	60 - 140	
Methylene Chloride	10.0	8.95		ug/L	90	0 60 - 140	
Tetrachloroethene	10.0	9.49		ug/L	95	70 - 130	
Toluene	10.0	8.41		ug/L	84	70 - 130	
trans-1,2-Dichloroethene	10.0	8.79		ug/L	88	3 70 - 130	
trans-1,3-Dichloropropene	10.0	12.5		ug/L	125	50 - 150	
Trichloroethene	10.0	10.1		ug/L	101	65 - 135	
Vinyl chloride	10.0	7.57		ug/L	76	10 - 170	
Dibromochloromethane	10.0	11.5		ug/L	115	70 - 135	
Bromodichloromethane	10.0	10.4		ug/L	104	65 - 135	

10.0

9.70

ug/L

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	111		28 - 163
4-Bromofluorobenzene (Surr)	99		41 - 122
Toluene-d8 (Surr)	79		53 - 125
Dibromofluoromethane (Surr)	94		59 - 168

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 180-399113/1-A

Matrix: Water

Chloroethane

Analysis Batch: 399580

Client Sample ID: Method Blank Prep Type: Total/NA

40 - 160

97

Prep Batch: 399113

MB	MB							
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ND		0.19	0.065	ug/L		05/17/22 14:55	05/21/22 15:10	1
ND		0.19	0.065	ug/L		05/17/22 14:55	05/21/22 15:10	1
ND		0.19	0.049	ug/L		05/17/22 14:55	05/21/22 15:10	1
ND		20	9.1	ug/L		05/17/22 14:55	05/21/22 15:10	1
ND		0.19	0.075	ug/L		05/17/22 14:55	05/21/22 15:10	1
ND		0.19	0.097	ug/L		05/17/22 14:55	05/21/22 15:10	1
ND		0.19	0.088	ug/L		05/17/22 14:55	05/21/22 15:10	1
	Result ND ND ND ND ND ND ND ND	ND ND ND ND ND	Result Qualifier RL ND 0.19 ND 0.19 ND 0.19 ND 20 ND 0.19 ND 0.19 ND 0.19 ND 0.19	Result Qualifier RL MDL ND 0.19 0.065 ND 0.19 0.065 ND 0.19 0.049 ND 20 9.1 ND 0.19 0.075 ND 0.19 0.097	Result Qualifier RL MDL Unit ND 0.19 0.065 ug/L ND 0.19 0.065 ug/L ND 0.19 0.049 ug/L ND 20 9.1 ug/L ND 0.19 0.075 ug/L ND 0.19 0.097 ug/L	Result Qualifier RL MDL ug/L Unit D ND 0.19 0.065 ug/L ug/L ND 0.19 0.065 ug/L ND 0.19 0.049 ug/L ND 0.19 0.075 ug/L ND 0.19 0.097 ug/L ND 0.19 0.097 ug/L	Result Qualifier RL MDL Unit D Prepared ND 0.19 0.065 ug/L 05/17/22 14:55 ND 0.19 0.065 ug/L 05/17/22 14:55 ND 0.19 0.049 ug/L 05/17/22 14:55 ND 20 9.1 ug/L 05/17/22 14:55 ND 0.19 0.075 ug/L 05/17/22 14:55 ND 0.19 0.097 ug/L 05/17/22 14:55 ND 0.19 0.097 ug/L 05/17/22 14:55	Result Qualifier RL MDL Unit D Prepared Analyzed ND 0.19 0.065 ug/L 05/17/22 14:55 05/21/22 15:10 ND 0.19 0.065 ug/L 05/17/22 14:55 05/21/22 15:10 ND 0.19 0.049 ug/L 05/17/22 14:55 05/21/22 15:10 ND 20 9.1 ug/L 05/17/22 14:55 05/21/22 15:10 ND 0.19 0.075 ug/L 05/17/22 14:55 05/21/22 15:10 ND 0.19 0.097 ug/L 05/17/22 14:55 05/21/22 15:10 ND 0.19 0.097 ug/L 05/17/22 14:55 05/21/22 15:10

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Client: ARCADIS U.S., Inc.

Job ID: 180-137972-1

Project/Site: Cytec Havre de Grace MD

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-399113/1-A

Matrix: Water

2,4,6-Trichlorophenol

Azobenzene)

Bis(2-chloroethoxy)methane

4-Chlorophenyl phenyl ether

1,2-Diphenylhydrazine(as

Analysis Batch: 399580

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 399113

Allalysis Batch. 399300	MB	MB						Prep Batch.	399113
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND		0.19	0.069	ug/L		05/17/22 14:55	05/21/22 15:10	1
Benzo[a]pyrene	ND		0.19	0.053	ug/L		05/17/22 14:55	05/21/22 15:10	1
Bis(2-chloroethyl)ether	ND		0.19	0.040	ug/L		05/17/22 14:55	05/21/22 15:10	1
Bis(2-ethylhexyl) phthalate	ND		10	6.2	ug/L		05/17/22 14:55	05/21/22 15:10	1
4-Bromophenyl phenyl ether	ND		1.0	0.32	ug/L		05/17/22 14:55	05/21/22 15:10	1
Butyl benzyl phthalate	ND		1.0	0.46	ug/L		05/17/22 14:55	05/21/22 15:10	1
4-Chloro-3-methylphenol	ND		1.0	0.28	ug/L		05/17/22 14:55	05/21/22 15:10	1
2-Chloronaphthalene	ND		0.19	0.059	ug/L		05/17/22 14:55	05/21/22 15:10	1
2-Chlorophenol	ND		1.0	0.13	ug/L		05/17/22 14:55	05/21/22 15:10	1
Chrysene	ND		0.19	0.081	ug/L		05/17/22 14:55	05/21/22 15:10	1
Dibenzo(a,h)-anthracene	ND		0.19	0.072	ug/L		05/17/22 14:55	05/21/22 15:10	1
Di-n-butyl phthalate	ND		1.0	0.74	ug/L		05/17/22 14:55	05/21/22 15:10	1
3,3'-Dichlorobenzidine	ND		1.0	0.58	ug/L		05/17/22 14:55	05/21/22 15:10	1
2,4-Dichlorophenol	ND		0.19	0.051	ug/L		05/17/22 14:55	05/21/22 15:10	1
Diethyl phthalate	ND		1.0	0.57	ug/L		05/17/22 14:55	05/21/22 15:10	1
2,4-Dimethylphenol	ND		1.0	0.17	ug/L		05/17/22 14:55	05/21/22 15:10	1
Dimethyl phthalate	ND		1.0	0.20	ug/L		05/17/22 14:55	05/21/22 15:10	1
4,6-Dinitro-2-methylphenol	ND		5.0	1.5	ug/L		05/17/22 14:55	05/21/22 15:10	1
2,4-Dinitrophenol	ND		10	1.5	ug/L		05/17/22 14:55	05/21/22 15:10	1
2,4-Dinitrotoluene	ND		1.0	0.35	ug/L		05/17/22 14:55	05/21/22 15:10	1
2,6-Dinitrotoluene	ND		1.0		ug/L		05/17/22 14:55	05/21/22 15:10	1
Di-n-octyl phthalate	ND		1.0		ug/L		05/17/22 14:55	05/21/22 15:10	1
Fluoranthene	ND		0.19	0.060	•		05/17/22 14:55	05/21/22 15:10	1
Fluorene	ND		0.19	0.069	ug/L		05/17/22 14:55	05/21/22 15:10	1
Hexachlorobenzene	ND		0.19	0.056	-		05/17/22 14:55	05/21/22 15:10	1
Hexachlorobutadiene	ND		0.19	0.069	ug/L		05/17/22 14:55	05/21/22 15:10	1
Hexachlorocyclopentadiene	ND		1.0		ug/L		05/17/22 14:55	05/21/22 15:10	1
Hexachloroethane	ND		1.0		ug/L		05/17/22 14:55	05/21/22 15:10	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.085	-		05/17/22 14:55	05/21/22 15:10	1
Isophorone	ND		1.0	0.19	ug/L		05/17/22 14:55	05/21/22 15:10	1
Naphthalene	ND		0.19	0.059	-		05/17/22 14:55	05/21/22 15:10	1
Nitrobenzene	ND		2.0		ug/L		05/17/22 14:55	05/21/22 15:10	1
2-Nitrophenol	ND		1.0		ug/L			05/21/22 15:10	1
4-Nitrophenol	ND		5.0		ug/L		05/17/22 14:55	05/21/22 15:10	1
N-Nitrosodimethylamine	ND		1.0	0.067	-		05/17/22 14:55	05/21/22 15:10	1
N-Nitrosodiphenylamine	ND		1.0		ug/L			05/21/22 15:10	1
N-Nitrosodi-n-propylamine	ND		0.19	0.071	•			05/21/22 15:10	1
2,2'-oxybis[1-chloropropane]	ND		0.19	0.058				05/21/22 15:10	1
Pentachlorophenol	ND		5.0		ug/L			05/21/22 15:10	1
Phenanthrene	ND		0.19	0.055				05/21/22 15:10	1
Phenol	ND		1.0		ug/L			05/21/22 15:10	1
Pyrene	ND		0.19	0.054				05/21/22 15:10	
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/21/22 15:10	1
0.4.C. Trickle and and	ND.		1.0	0.10	g, /I		05/17/22 14:00	05/21/22 10:10	,

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05/17/22 14:55 05/21/22 15:10

05/17/22 14:55 05/21/22 15:10

05/17/22 14:55 05/21/22 15:10

05/17/22 14:55 05/21/22 15:10

1.0

1.0

1.0

1.0

0.22 ug/L

0.15 ug/L

0.22 ug/L

0.20 ug/L

ND

ND

ND

ND

Client: ARCADIS U.S., Inc. Job ID: 180-137972-1

Project/Site: Cytec Havre de Grace MD

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-399113/1-A

Matrix: Water

Analysis Batch: 399580

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 399113

	MB	MB				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	90		47 - 107	05/17/22 14:55	05/21/22 15:10	1
2-Fluorophenol	98		35 - 109	05/17/22 14:55	05/21/22 15:10	1
2,4,6-Tribromophenol	69		32 - 127	05/17/22 14:55	05/21/22 15:10	1
Nitrobenzene-d5	95		47 - 110	05/17/22 14:55	05/21/22 15:10	1
Phenol-d5	94		37 - 110	05/17/22 14:55	05/21/22 15:10	1
Terphenyl-d14	96		32 - 115	05/17/22 14:55	05/21/22 15:10	1

Lab Sample ID: LCS 180-399113/2-A

Matrix: Water

Analysis Batch: 399580

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 399113

Spike	LCS LCS			%Rec
Added		er Unit	D %Rec	Limits
10.0	7.72	ug/L		33 - 145
10.0	7.45	ug/L	75	47 - 145
10.0	7.54	ug/L	75	27 - 133
10.0	ND	ug/L	22	5 - 100
10.0	7.42	ug/L	74	33 - 143
10.0	6.16	ug/L	62	24 - 150
10.0	7.50	ug/L	75	11 - 150
10.0	7.90	ug/L	79	10 - 150
10.0	7.60	ug/L	76	17 - 150
10.0	7.61	ug/L	76	12 - 150
10.0	8.12 J	ug/L	81	10 - 150
10.0	7.13	ug/L	71	53 - 127
10.0	8.17	ug/L	82	10 - 150
10.0	8.40	ug/L	84	22 - 147
10.0	7.26	ug/L	73	60 - 120
10.0	7.75	ug/L	77	23 - 134
10.0	7.27	ug/L	73	17 - 150
10.0	7.52	ug/L	75	10 - 150
10.0	7.88	ug/L	79	10 - 120
10.0	6.31	ug/L	63	10 - 150
10.0	7.63	ug/L	76	39 - 135
10.0	7.58	ug/L	76	10 - 120
10.0	8.21		82	32 - 120
10.0	7.11	ug/L	71	10 - 120
20.0	12.1	ug/L	61	10 - 150
20.0	10.5	ug/L	52	10 - 150
10.0	7.69	ug/L	77	39 - 139
10.0	7.56	ug/L	76	50 - 150
10.0	6.83	ug/L	68	10 - 146
	7.66		77	26 - 137
	7.41			59 - 121
10.0	6.74	-	67	10 - 150
10.0	7.13	ug/L	71	24 - 120
10.0	6.68	ug/L	67	37 - 121
10.0	8.41	ug/L	84	40 - 120
10.0	7.77	ug/L	78	10 - 150
	10.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0	Added Result Qualified 10.0 7.72 10.0 7.45 10.0 7.54 10.0 ND 10.0 7.42 10.0 6.16 10.0 7.50 10.0 7.50 10.0 7.60 10.0 7.61 10.0 8.12 10.0 7.13 10.0 8.40 10.0 7.26 10.0 7.52 10.0 7.52 10.0 7.58 10.0 7.58 10.0 7.58 10.0 7.58 10.0 7.58 10.0 7.58 10.0 7.58 10.0 7.51 20.0 10.5 10.0 7.56 10.0 7.56 10.0 7.41 10.0 7.41 10.0 7.41 10.0 6.74	Added Result Qualifier Unit 10.0 7.72 ug/L 10.0 7.45 ug/L 10.0 ND ug/L 10.0 ND ug/L 10.0 7.42 ug/L 10.0 6.16 ug/L 10.0 7.50 ug/L 10.0 7.50 ug/L 10.0 7.50 ug/L 10.0 7.60 ug/L 10.0 7.61 ug/L 10.0 7.61 ug/L 10.0 8.12 J ug/L 10.0 8.17 ug/L 10.0 8.40 ug/L ug/L 10.0 7.26 ug/L 10.0 7.52 ug/L 10.0 7.52 ug/L 10.0 7.63 ug/L 10.0 7.58 ug/L 10.0 7.58 ug/L 10.0 7.51 ug/L 2	Added Result Qualifier Unit D %Rec 10.0 7.72 ug/L 77 10.0 7.45 ug/L 75 10.0 ND ug/L 22 10.0 7.42 ug/L 74 10.0 6.16 ug/L 62 10.0 7.50 ug/L 75 10.0 7.50 ug/L 75 10.0 7.60 ug/L 76 10.0 7.61 ug/L 76 10.0 7.61 ug/L 81 10.0 7.61 ug/L 81 10.0 8.17 ug/L 84 10.0 8.17 ug/L 84 10.0 7.26 ug/L 73 10.0 7.75 ug/L 73 10.0 7.52 ug/L 75 10.0 7.58 ug/L 76 10.0 7.58 ug/L 76

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6/2/2022

Client: ARCADIS U.S., Inc.

Job ID: 180-137972-1

Project/Site: Cytec Havre de Grace MD

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-399113/2-A

Matrix: Water

Analysis Batch: 399580

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 399113

	Spike	LCS I	LCS		%Rec	
Analyte	Added	Result (Qualifier Unit	D %Rec	Limits	
Isophorone	10.0	7.91	ug/L	79	21 - 150	
Naphthalene	10.0	7.53	ug/L	75	21 - 133	
Nitrobenzene	10.0	7.99	ug/L	80	35 - 150	
2-Nitrophenol	10.0	7.87	ug/L	79	29 - 150	
4-Nitrophenol	20.0	16.4	ug/L	82	10 - 132	
N-Nitrosodimethylamine	10.0	7.82	ug/L	78	33 - 130	
N-Nitrosodiphenylamine	10.0	7.18	ug/L	72	51 - 100	
N-Nitrosodi-n-propylamine	10.0	8.24	ug/L	82	10 - 150	
2,2'-oxybis[1-chloropropane]	10.0	8.43	ug/L	84	36 - 150	
Pentachlorophenol	20.0	12.2	ug/L	61	14 - 150	
Phenanthrene	10.0	7.20	ug/L	72	54 - 120	
Phenol	10.0	7.69	ug/L	77	10 - 120	
Pyrene	10.0	7.47	ug/L	75	52 - 120	
1,2,4-Trichlorobenzene	10.0	7.19	ug/L	72	44 - 142	
2,4,6-Trichlorophenol	10.0	7.36	ug/L	74	37 - 144	
Bis(2-chloroethoxy)methane	10.0	6.55	ug/L	65	33 - 150	
4-Chlorophenyl phenyl ether	10.0	7.09	ug/L	71	25 - 150	
1,2-Diphenylhydrazine(as	10.0	8.01	ug/L	80	43 - 105	
Azobenzene)						

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl	74		47 - 107
2-Fluorophenol	80		35 - 109
2,4,6-Tribromophenol	71		32 - 127
Nitrobenzene-d5	84		47 - 110
Phenol-d5	79		37 - 110
Terphenyl-d14	71		32 - 115

Lab Sample ID: 180-137972-4 MS

Matrix: Water

Analysis Batch: 399580

Client Sam	ple IC): POTV	N (051022)
------------	--------	---------	------------

Prep Type: Total/NA

Prep Batch: 399113

Analysis Batch. 000000	Sample	Sample	Spike	MS	MS				%Rec
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Acenaphthylene	ND		10.4	7.72		ug/L		74	35 - 145
Acenaphthene	ND		10.4	7.38		ug/L		71	47 - 145
Anthracene	ND		10.4	7.79		ug/L		75	27 - 133
Benzidine	ND	F1	10.4	ND	F1	ug/L		0	5 - 100
Benzo[a]anthracene	ND		10.4	7.88		ug/L		76	33 - 143
Benzo[b]fluoranthene	ND		10.4	7.11		ug/L		68	24 - 159
Benzo[k]fluoranthene	ND		10.4	7.59		ug/L		73	11 - 162
Benzo[g,h,i]perylene	ND		10.4	8.59		ug/L		82	10 - 170
Benzo[a]pyrene	ND		10.4	7.98		ug/L		77	17 - 163
Bis(2-chloroethyl)ether	ND		10.4	7.48		ug/L		72	12 - 158
Bis(2-ethylhexyl) phthalate	ND		10.4	9.76	J	ug/L		94	10 - 158
4-Bromophenyl phenyl ether	ND		10.4	7.31		ug/L		70	53 - 127
Butyl benzyl phthalate	ND		10.4	9.58		ug/L		92	10 - 152
4-Chloro-3-methylphenol	ND		10.4	7.04		ug/L		68	22 - 147
2-Chloronaphthalene	ND		10.4	7.07		ug/L		68	60 - 120
2-Chlorophenol	ND		10.4	5.99		ug/L		58	23 - 134

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Spike

Client: ARCADIS U.S., Inc. Job ID: 180-137972-1

MS MS

Project/Site: Cytec Havre de Grace MD

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Sample Sample

ND

Lab Sample ID: 180-137972-4 MS

Matrix: Water

Analysis Batch: 399580

Client Sample ID: POTW (051022)

Prep Type: Total/NA

_	Batch: 399113	
%Rec		

Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chrysene	ND		10.4	7.72		ug/L		74	17 - 168	
Dibenzo(a,h)-anthracene	ND		10.4	8.25		ug/L		79	10 - 170	
Di-n-butyl phthalate	2.1		10.4	11.5		ug/L		90	10 - 120	
3,3'-Dichlorobenzidine	ND		10.4	6.06		ug/L		58	10 - 170	
2,4-Dichlorophenol	ND		10.4	5.67		ug/L		54	39 - 135	
Diethyl phthalate	ND		10.4	6.61		ug/L		63	10 - 120	
2,4-Dimethylphenol	ND		10.4	7.10		ug/L		68	32 - 120	
Dimethyl phthalate	ND		10.4	6.06		ug/L		58	10 - 120	
4,6-Dinitro-2-methylphenol	ND		20.8	13.6		ug/L		65	10 - 170	
2,4-Dinitrophenol	ND		20.8	14.2		ug/L		68	10 - 170	
2,4-Dinitrotoluene	ND		10.4	8.03		ug/L		77	39 ₋ 139	
2,6-Dinitrotoluene	ND		10.4	7.92		ug/L		76	50 - 158	
Di-n-octyl phthalate	ND		10.4	8.18		ug/L		79	10 - 146	
Fluoranthene	ND		10.4	8.14		ug/L		78	26 - 137	
Fluorene	ND		10.4	7.36		ug/L		71	59 - 121	
Hexachlorobenzene	ND		10.4	6.95		ug/L		67	10 - 152	
Hexachlorobutadiene	ND		10.4	6.25		ug/L		60	24 - 120	
Hexachlorocyclopentadiene	ND		10.4	5.33		ug/L		51	41 - 106	
Hexachloroethane	ND		10.4	7.58		ug/L		73	40 - 120	

ND 10.4 7.53 ug/L 72 21 - 170 ND 10.4 6.77 ug/L 65 21 - 133 ND 10.4 7.54 ug/L 72 35 - 170ND 10.4 5.98 57 29 - 170 ug/L ND 20.8 63 13.2 ug/L 10 - 132 N-Nitrosodimethylamine ND 10.4 7.21 ug/L 69 48 - 109 70 56 - 100 N-Nitrosodiphenylamine ND 10.4 7.29 ug/L

8.28

10.4

ug/L

80

10 - 170

N-Nitrosodi-n-propylamine ND 10.4 7.85 ug/L 75 10 - 170 2,2'-oxybis[1-chloropropane] ND 10.4 8.05 ug/L 77 36 - 166 Pentachlorophenol ND 20.8 8.94 ug/L 43 17 - 170 ND 10.4 7.63 ug/L 73 54 - 120 ND 10.4 6.06 ug/L 58 10 - 120 76 ND 10.4 7.88 ug/L 52 - 120

Pyrene 62 1,2,4-Trichlorobenzene ND 10.4 ug/L 44 - 142 6.48 ND 10.4 5.63 54 37 - 144 2,4,6-Trichlorophenol ug/L Bis(2-chloroethoxy)methane ND 10.4 6.31 ug/L 61 33 - 170

4-Chlorophenyl phenyl ether ND 10.4 7.15 ug/L 25 - 158 ND 10.4 ug/L 82 46 - 103 1,2-Diphenylhydrazine(as 8.49

Azobenzene)

Indeno[1,2,3-cd]pyrene

Isophorone

Naphthalene

Nitrobenzene

2-Nitrophenol

4-Nitrophenol

Phenanthrene

Phenol

ИS	MS
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Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl	66	-	47 - 107
2-Fluorophenol	59		35 - 109
2,4,6-Tribromophenol	50		32 - 127
Nitrobenzene-d5	74		47 - 110
Phenol-d5	61		37 - 110
Terphenyl-d14	73		32 - 115

Client: ARCADIS U.S., Inc. Job ID: 180-137972-1

Project/Site: Cytec Havre de Grace MD

Lab Sample ID: MB 180-399223/1-A

Method: EPA 200.7 Rev 4 - Metals (ICP)

Matrix: Water

Analysis Batch: 399442

Client Sample ID: Method Blank **Prep Type: Total Recoverable Prep Batch: 399223**

	MB	MR							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10	5.7	ug/L		05/18/22 13:03	05/19/22 22:56	1
Cadmium	ND		5.0	0.33	ug/L		05/18/22 13:03	05/19/22 22:56	1
Chromium	ND		5.0	2.6	ug/L		05/18/22 13:03	05/19/22 22:56	1
Copper	ND		25	3.9	ug/L		05/18/22 13:03	05/19/22 22:56	1
Lead	ND		10	2.3	ug/L		05/18/22 13:03	05/19/22 22:56	1
Nickel	ND		40	2.1	ug/L		05/18/22 13:03	05/19/22 22:56	1
Silver	ND		5.0	0.87	ug/L		05/18/22 13:03	05/19/22 22:56	1
Zinc	ND		20	3.3	ug/L		05/18/22 13:03	05/19/22 22:56	1
-									

Lab Sample ID: LCS 180-399223/2-A

Matrix: Water

Analysis Batch: 399442

Client Sample ID: Lab Control Sample Prep Type: Total Recoverable

Prep Batch: 399223

LCS LCS %Rec Spike Added Result Qualifier D %Rec Limits Analyte Unit Arsenic 1000 1130 85 - 115 ug/L 113 500 Cadmium 552 ug/L 110 85 _ 115 Chromium 500 531 ug/L 106 85 - 115 500 518 104 85 - 115 Copper ug/L Lead 500 542 108 85 - 115 ug/L ug/L Nickel 500 548 110 85 _ 115 Silver 250 272 ug/L 109 85 - 115 Zinc 250 273 ug/L 109 85 - 115

Method: EPA 245.1 Rev. - Mercury (CVAA)

Lab Sample ID: MB 180-400485/1-A

Matrix: Water

Analysis Batch: 400599

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 400485

MB MB

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Mercury $\overline{\mathsf{ND}}$ 0.20 0.13 ug/L 06/01/22 07:25 06/01/22 18:12

Lab Sample ID: LCS 180-400485/2-A

Matrix: Water

Analysis Batch: 400599

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 400485

LCS LCS Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits Mercury 2.50 2.73 109 85 - 115 ug/L

Method: SM 4500CN E - Total Cyanide

Lab Sample ID: MB 180-398646/4-A

Matrix: Water

Analysis Batch: 399126

Client Sample ID: Method Blank Prep Type: Total/NA

Prep Batch: 398646

MB MB Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Cyanide, Total ND 0.010 0.0080 mg/L 05/17/22 08:00 05/17/22 13:22

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Client: ARCADIS U.S., Inc. Job ID: 180-137972-1

Project/Site: Cytec Havre de Grace MD

Method: SM 4500CN E - Total Cyanide (Continued)

Analyte

Cyanide, Total

Lab Sample ID: HLCS 180-398646/2-A		Client Sample ID: Lab Control Samp					: Lab Control Sample
Matrix: Water							Prep Type: Total/NA
Analysis Batch: 399126							Prep Batch: 398646
	Spike	HLCS	HLCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Cyanide, Total	0.250	0.251		mg/L		100	90 - 110
Lab Sample ID: LCS 180-398646/3-A				Clie	nt Sar	nple ID	: Lab Control Sample
Matrix: Water							Prep Type: Total/NA
Analysis Batch: 399126							Prep Batch: 398646
	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Cyanide, Total	0.200	0.198		mg/L		99	90 - 110
Lab Sample ID: LLCS 180-398646/1-A Matrix: Water Analysis Batch: 399126				Clie	nt Sar	nple ID	: Lab Control Sample Prep Type: Total/NA Prep Batch: 398646

LLCS LLCS

0.0509

Result Qualifier Unit

mg/L

Spike

Added

0.0500

%Rec

Limits

90 - 110

D %Rec

QC Association Summary

Client: ARCADIS U.S., Inc.

Job ID: 180-137972-1 Project/Site: Cytec Havre de Grace MD

GC/MS VOA

Analysis Batch: 398499

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-137972-1	EW-1 (051022)	Total/NA	Water	EPA 624.1	
180-137972-2	MW-10D (051022)	Total/NA	Water	EPA 624.1	
180-137972-3	EFFLUENT (051022)	Total/NA	Water	EPA 624.1	
180-137972-4	POTW (051022)	Total/NA	Water	EPA 624.1	
180-137972-5	TRIP BLANK	Total/NA	Water	EPA 624.1	
MB 180-398499/6	Method Blank	Total/NA	Water	EPA 624.1	
LCS 180-398499/4	Lab Control Sample	Total/NA	Water	EPA 624.1	

GC/MS Semi VOA

Prep Batch: 399113

Lab Sample ID 180-137972-4	Client Sample ID POTW (051022)	Prep Type Total/NA	Matrix Water	Method 625	Prep Batch
MB 180-399113/1-A	Method Blank	Total/NA	Water	625	
LCS 180-399113/2-A	Lab Control Sample	Total/NA	Water	625	
180-137972-4 MS	POTW (051022)	Total/NA	Water	625	

Analysis Batch: 399580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-137972-4	POTW (051022)	Total/NA	Water	EPA 625.1	399113
MB 180-399113/1-A	Method Blank	Total/NA	Water	EPA 625.1	399113
LCS 180-399113/2-A	Lab Control Sample	Total/NA	Water	EPA 625.1	399113
180-137972-4 MS	POTW (051022)	Total/NA	Water	EPA 625.1	399113

Metals

Prep Batch: 399223

Lab Sample ID 180-137972-4	Client Sample ID POTW (051022)	Prep Type Total Recoverable	Water	Method 200.7	Prep Batch
MB 180-399223/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 180-399223/2-A	Lab Control Sample	Total Recoverable	Water	200.7	

Analysis Batch: 399442

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-137972-4	POTW (051022)	Total Recoverable	Water	EPA 200.7 Rev 4	399223
MB 180-399223/1-A	Method Blank	Total Recoverable	Water	EPA 200.7 Rev 4	399223
LCS 180-399223/2-A	Lab Control Sample	Total Recoverable	Water	EPA 200.7 Rev 4	399223

Prep Batch: 400485

Lab Sample ID 180-137972-4	Client Sample ID POTW (051022)	Prep Type Total/NA	Matrix Water	Method 245.1	Prep Batch
MB 180-400485/1-A	Method Blank	Total/NA	Water	245.1	
LCS 180-400485/2-A	Lab Control Sample	Total/NA	Water	245.1	

Analysis Batch: 400599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-137972-4	POTW (051022)	Total/NA	Water	EPA 245.1 Rev.	400485
MB 180-400485/1-A	Method Blank	Total/NA	Water	EPA 245.1 Rev.	400485
LCS 180-400485/2-A	Lab Control Sample	Total/NA	Water	EPA 245.1 Rev.	400485

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6/2/2022

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QC Association Summary

Client: ARCADIS U.S., Inc. Job ID: 180-137972-1

Project/Site: Cytec Havre de Grace MD

General Chemistry

Prep Batch: 398646

Lab Sample ID 180-137972-4	Client Sample ID POTW (051022)	Prep Type Total/NA	Matrix Water	Method SM 4500 CN C	Prep Batch
MB 180-398646/4-A	Method Blank	Total/NA	Water	SM 4500 CN C	
HLCS 180-398646/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LCS 180-398646/3-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LLCS 180-398646/1-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	

Analysis Batch: 399126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-137972-4	POTW (051022)	Total/NA	Water	SM 4500CN E	398646
MB 180-398646/4-A	Method Blank	Total/NA	Water	SM 4500CN E	398646
HLCS 180-398646/2-A	Lab Control Sample	Total/NA	Water	SM 4500CN E	398646
LCS 180-398646/3-A	Lab Control Sample	Total/NA	Water	SM 4500CN E	398646
LLCS 180-398646/1-A	Lab Control Sample	Total/NA	Water	SM 4500CN E	398646

Eurofins Pittsburgh 301, Alpha Drive RIDC Park

Pittsburgh, PA 15238

Chain of Custody Record

Baltimore #201

🚓 eurofins

Environment Testing America

Phone: 412-963-7058 Fax: 412-963-2468												78	20	.1	è				
Client Information	Sampler: An	dy F	eild	Col	РМ: ussy, J	ill L						rrier Tra		No(s):		COC No: 180-77576	5-14808.	.1	
Client Contact Ms. Shwetha Sridharan	Phone: 443	dy F1 354	0186	E-Ma Jill.	^{ail:} Coluss	y@Eur	ofinse	et.com			St	ete of O	rigin:	ano	/	Page: Page 1 of	1		
Company: ARCADIS U.S., Inc.	•		PWSID:				,	1	Analy	sis F						Job #:			-
Address: 7550 Teague Road Suite 210	Due Date Request	ed: St	andurd		91		18	2							7 47	Preservation	on Code:	s:	
City: Hanover	TAT Requested (d	ays):						7							1000	A - HCL B - NaOH		VI - Hexane VI - None	
State, Zip:			<i>smal</i>				2	7		m						C - Zn Aceta D - Nitric Ac	id 1	0 - AsNaO	S
MD, 21076 Phone:	Compliance Proje	ct: A Yes	ΔNo		-	PR EC	7	S.		000						E - NaHSO4	i	Q - Na2SO: R - Na2S2O	D3
302-897-8993(Tel) Email:	30005455.0002 Wo #:	2.			(0)	1		29	2							G - Amchlor H - Ascorbic	Acid	S - H2SO4 I - TSP Doo J - Acetone	decahydrate
shwetha.sridharan@arcadis.com				- 10	0.0	-	S	3		450						J - DI Water	١.	/ - MCAA // - pH 4-5	
Project Name: Cytec Havre de Grace MD	Project #: 18017987				3(0/6	7	_ 1	65	20	2						L - EDIA		Z - other (s	
Site: Pennsylvania	SSOW#:	1		_	ampi	62	129	1	٧.	الع									
			Sample	Matrix	8		3	3	26	7					1 1				
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Sample Identification	Sample Date	Sample Time	(C=comp, G=grab) в	O=wasts/oil, T=Tissue, A=Air		2	3,	3 8	N	2					Togatha and a second	9			ote:
No. of the Control of		><	Preservati	on Code:	XX	A	NA	VB		1,0	<u>200</u>	S	\$		>				
EW-1 (051022)	5/10/22	1030	G	W	NN		3		Ш							₩.		■ ≥	
MW-10D (051022)	1.	1035				3	3									4		stody	
Effluent (05/022)		1040	(- (3	3!											 	
MW-10D (051022) Effluent (051022) POTW (051022) Trip Blank	5/10/22	1/00	6	W	1/2	3	3 2	2 1		1					1984			ig ig	
Trip Blank	_ `_	_	-	_		2	2								100	82) 86 57		© 5	
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Possible Hazard Identification					Sa					nay b	e asse	essed	if san	nples a	re retail	ned longer t	han 1 m	onth)	
Non-Hazard Flammable Skin Irritant Po	oison B Unkn	own 🗀 j	Radiological		-	Re:		o Clie		L	Disp	osal E	By Lab		☐ Arc	chive For		Months	
Deliverable Requested: I, II, III, IV, Other (specify)					Эр	eciai ir	istruci	tions/c	JC Re	quirer	nents.	1							
Empty Kit Relinquished by:	Date/Time:	Date:	lo	ompany	Time:	Receive	ed by:	0	1		0	Meth		hipment:	. 1		Ir	Company	
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Relirquished by M-C	5/10/22	170	0	ompany A-BA	e it	Receive	ed by:	1	16	14	als	4	F	Date/Time	5	11-20	کے ا	company 7	AH H
Relinquished by:	Date/Tirge:		Ċ	ompany		Receive	ed by:	The same of the sa			-		C	Date/Time		90	7	ompany	
Custody Seals Intact: Custody Seal No.:				÷		Cooler	Tempe	rature(s	c) °C and	d Other	Remark	cs:				, ,			
Δ Yes Δ No			Pac	e 26 of	27	L													6/2/20

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 180-137972-1

Login Number: 137972 List Source: Eurofins Pittsburgh

List Number: 1

Creator: Watson, Debbie

Creator: watson, Debbie		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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Environment Testing America

ANALYTICAL REPORT

Eurofins Pittsburgh 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 Tel: (412)963-7058

Laboratory Job ID: 180-141418-1

Client Project/Site: Cytec Havre de Grace MD

For:

ARCADIS U.S., Inc. 7550 Teague Road Suite 210 Hanover, Maryland 21076

Attn: Ms. Shwetha Sridharan

Josh

Authorized for release by: 8/9/2022 10:18:26 AM

Jill Colussy, Project Manager I (412)963-2444

Jill.Colussy@et.eurofinsus.com

Review your project results through

.....LINKS

Have a Question?



Visit us at: www.eurofinsus.com/Env This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

PA Lab ID: 02-00416

Client: ARCADIS U.S., Inc. Project/Site: Cytec Havre de Grace MD Laboratory Job ID: 180-141418-1

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Case Narrative

Client: ARCADIS U.S., Inc.

Job ID: 180-141418-1 Project/Site: Cytec Havre de Grace MD

Job ID: 180-141418-1

Laboratory: Eurofins Pittsburgh

Narrative

Job Narrative 180-141418-1

Receipt

The samples were received on 7/16/2022 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.7° C.

GC/MS VOA

Due to the concentration of target compounds detected and/or matrix, sample EW-1 (071522) (180-141418-1) and EFFLUENT (071522) (180-141418-3) were analyzed at a dilution. Elevated reporting limits (RLs) are provided.

Samples EW-1 (071522) (180-141418-1) and MW10D (071522) (180-141418-2) had surrogate 1,2-Dichloroethne-d4 recover above the control limits. Evidence of matrix interferences was not obvious. These were re-analyses to confirm results. All data was reported.

The laboratory control sample (LCS) for batch 180-405301 recovered outside control limits for 1,1,2,2-Tetrachloroethane, 1,2-Dichloroethane, Acrylonitrile and Bromoform. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

The laboratory control sample (LCS) for batch 180-405464 recovered outside control limits for Acrylonitrile and Bromoform. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

The laboratory control sample (LCS) for batch 180-405464 recovered outside control limits for Toluene. A low-level LCS (LLCS), spiked at the reporting limit (RL), was prepared with this batch. The affected target analytes recovered within acceptance limits; therefore, the LLCS demonstrates the analytical system had sufficient sensitivity to detect the compounds had they been present. Since the affected target compounds were not detected in the samples, the data have been reported and qualified.

Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 180-141418-1

Project/Site: Cytec Havre de Grace MD

Qualifiers

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 Qualifier
 Qualifier Description

 * LCS and/or LCSD is outside acceptance limits, low biased.

 *+
 LCS and/or LCSD is outside acceptance limits, high biased.

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

S1+ Surrogate recovery exceeds control limits, high biased.

Glossary

Abbreviation	These commonly	y used abbreviations ma	y or may not	be present in this report.

Eisted under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
CFU Colony Forming Unit
CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
MPN Most Probable Number
MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive
QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

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Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.

Job ID: 180-141418-1

Project/Site: Cytec Havre de Grace MD

Laboratory: Eurofins Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-22 *
California	State	2891	04-30-23
Connecticut	State	PH-0688	09-30-22
Florida	NELAP	E871008	06-30-23
Georgia	State	PA 02-00416	04-30-23
Illinois	NELAP	004375	06-30-23
Kansas	NELAP	E-10350	03-31-23
Kentucky (UST)	State	162013	04-30-23
Kentucky (WW)	State	KY98043	12-31-22
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	06-30-23
Maine	State	PA00164	03-06-24
Minnesota	NELAP	042-999-482	12-31-22
Nevada	State	PA00164	08-31-22
New Hampshire	NELAP	2030	04-04-23
New Jersey	NELAP	PA005	06-30-23
New York	NELAP	11182	04-01-23
North Carolina (WW/SW)	State	434	12-31-22
North Dakota	State	R-227	04-30-23
Oregon	NELAP	PA-2151	02-07-23
Pennsylvania	NELAP	02-00416	04-30-23
Rhode Island	State	LAO00362	12-31-21 *
South Carolina	State	89014	06-30-22 *
Texas	NELAP	T104704528	03-31-23
USDA	US Federal Programs	P330-16-00211	06-26-22 *
Utah	NELAP	PA001462019-8	05-31-23
Virginia	NELAP	10043	09-14-22
West Virginia DEP	State	142	01-31-23
Wisconsin	State	998027800	08-31-22

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 $^{^{\}star} \ \text{Accreditation/Certification renewal pending - accreditation/certification considered valid}.$

Eurofins Pittsburgh

Sample Summary

Client: ARCADIS U.S., Inc.

Job ID: 180-141418-1

Project/Site: Cytec Havre de Grace MD

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-141418-1	EW-1 (071522)	Water	07/15/22 09:30	07/16/22 09:30
180-141418-2	MW10D (071522)	Water	07/15/22 09:40	07/16/22 09:30
180-141418-3	EFFLUENT (071522)	Water	07/15/22 09:45	07/16/22 09:30
180-141418-4	TRIP BLANK	Water	07/15/22 00:01	07/16/22 09:30

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Method Summary

Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Method	Method Description	Protocol	Laboratory
EPA 624.1	Volatile Organic Compounds (GC/MS)	40CFR136A	EETNE PIT

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

Laboratory References:

EETNE PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Job ID: 180-141418-1

Client: ARCADIS U.S., Inc.

Batch

Instrument ID: CHHP6

Instrument ID: CHHP6

Method

EPA 624.1

EPA 624.1

Run

RA

Project/Site: Cytec Havre de Grace MD

Client Sample ID: EW-1 (071522)

Date Collected: 07/15/22 09:30

Date Received: 07/16/22 09:30

Lab Sample ID: 180-141418-1

Matrix: Water

Job ID: 180-141418-1

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 624.1 at ID: CHHP6		5	5 mL	5 mL	405301	07/16/22 15:35	SW1	EETNE PIT
Total/NA	Analysis Instrumen	EPA 624.1 at ID: CHHP6	RADL	100	5 mL	5 mL	405464	07/19/22 23:35	PJJ	EETNE PI

Client Sample ID: MW10D (071522)

Batch

Type

Analysis

Analysis

Date Collected: 07/15/22 09:40 Date Received: 07/16/22 09:30

Prep Type

Total/NA

Total/NA

Lab Sample ID: 180-141418-2 **Matrix: Water**

Lab Sample ID: 180-141418-4

Matrix: Water

Dil Initial Final **Batch** Prepared or Analyzed **Factor Amount** Amount Number Analyst 405301 07/16/22 16:02 SW1 **EETNE PIT** 5 mL 5 mL 5 mL 5 mL 405464 07/19/22 22:42 PJJ EETNE PI

Client Sample ID: EFFLUENT (071522)

Date Collected: 07/15/22 09:45 Date Received: 07/16/22 09:30

Lab Sample ID: 180-141418-3 **Matrix: Water**

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumer	EPA 624.1 It ID: CHHP6		5	5 mL	5 mL	405301	07/16/22 16:28	SW1	EETNE PIT
Total/NA	Analysis Instrumer	EPA 624.1 at ID: CHHP6	RA	5	5 mL	5 mL	405464	07/19/22 23:08	PJJ	EETNE PI

Client Sample ID: TRIP BLANK

Date Collected: 07/15/22 00:01

Date Received: 07/16/22 09:30

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 624.1		1	5 mL	5 mL	405301	07/16/22 16:55	SW1	EETNE PIT
Instrument ID: CHHP6										

Laboratory References:

EETNE PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: EETNE PIT

Batch Type: Analysis PJJ = Patrick Journet SW1 = Sunan Wang-un

Eurofins Pittsburgh

Client: ARCADIS U.S., Inc.

Job ID: 180-141418-1

Project/Site: Cytec Havre de Grace MD

Client Sample ID: EW-1 (071522)

Date Collected: 07/15/22 09:30 Date Received: 07/16/22 09:30

Dibromofluoromethane (Surr)

Lab Sample ID: 180-141418-1

Matrix: Water

Method: EPA 624.1 - Volatil Analyte	_	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	3.0	ug/L		<u> </u>	07/16/22 15:35	5
1,1,2,2-Tetrachloroethane	ND	*+	5.0	3.0	ug/L			07/16/22 15:35	5
1,1,2-Trichloroethane	ND		5.0	2.3	ug/L			07/16/22 15:35	5
1,1-Dichloroethane	ND		5.0	1.5	ug/L			07/16/22 15:35	5
1,1-Dichloroethene	ND		5.0	2.8	ug/L			07/16/22 15:35	5
1,2-Dichloropropane	ND		5.0	3.3	ug/L			07/16/22 15:35	5
1,2-Dichlorobenzene	ND		5.0	1.8	ug/L			07/16/22 15:35	5
1,3-Dichlorobenzene	ND		5.0	2.5	ug/L			07/16/22 15:35	5
1,4-Dichlorobenzene	ND		5.0	2.7	ug/L			07/16/22 15:35	5
2-Chloroethyl vinyl ether	ND		10	8.6	ug/L			07/16/22 15:35	5
Acrolein	ND		100	80	ug/L			07/16/22 15:35	5
Acrylonitrile	ND	*+	100	39	ug/L			07/16/22 15:35	5
Benzene	ND		5.0	3.0	ug/L			07/16/22 15:35	5
Bromoform	ND	*+	5.0	4.9	ug/L			07/16/22 15:35	5
Bromomethane	ND		5.0	4.4	ug/L			07/16/22 15:35	5
Carbon tetrachloride	ND		5.0	4.4	ug/L			07/16/22 15:35	5
Chlorobenzene	ND		5.0	2.5	ug/L			07/16/22 15:35	5
Chloroform	ND		5.0	3.0	ug/L			07/16/22 15:35	5
Chloromethane	ND		5.0	4.5	ug/L			07/16/22 15:35	5
cis-1,3-Dichloropropene	ND		5.0	3.0	ug/L			07/16/22 15:35	5
Ethylbenzene	ND		5.0	2.5	ug/L			07/16/22 15:35	5
Methylene Chloride	ND		5.0	4.4	ug/L			07/16/22 15:35	5
Tetrachloroethene	ND		5.0	2.3	ug/L			07/16/22 15:35	5
Toluene	ND	*_	5.0	2.3	ug/L			07/16/22 15:35	5
trans-1,2-Dichloroethene	ND		5.0	3.4	ug/L			07/16/22 15:35	5
trans-1,3-Dichloropropene	ND		5.0	2.9	ug/L			07/16/22 15:35	5
Trichloroethene	8.0		5.0	3.4	ug/L			07/16/22 15:35	5
Vinyl chloride	ND		5.0	2.0	ug/L			07/16/22 15:35	5
Dibromochloromethane	ND		5.0	4.2	ug/L			07/16/22 15:35	5
Bromodichloromethane	ND		5.0	3.2	ug/L			07/16/22 15:35	5
Chloroethane	ND		5.0	4.5	ug/L			07/16/22 15:35	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	128		28 - 163			-		07/16/22 15:35	5
4-Bromofluorobenzene (Surr)	91		41 - 122					07/16/22 15:35	5
Toluene-d8 (Surr)	60		53 - 125					07/16/22 15:35	5

Method: EPA 624.1 - Volatil	e Organic Con	npounds (GC/MS) - RAI	DL					
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	790		100	57	ug/L			07/19/22 23:35	100
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	165	S1+	28 - 163			-		07/19/22 23:35	100
4-Bromofluorobenzene (Surr)	118		41 - 122					07/19/22 23:35	100
Toluene-d8 (Surr)	70		53 - 125					07/19/22 23:35	100
Dibromofluoromethane (Surr)	135		59 - 168					07/19/22 23:35	100

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Eurofins Pittsburgh

8/9/2022

07/16/22 15:35

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Client: ARCADIS U.S., Inc.

Job ID: 180-141418-1

Project/Site: Cytec Havre de Grace MD

Client Sample ID: MW10D (071522)

Date Collected: 07/15/22 09:40 Date Received: 07/16/22 09:30

Dibromofluoromethane (Surr)

Lab Sample ID: 180-141418-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			07/16/22 16:02	1
1,1,2,2-Tetrachloroethane	ND	*+	1.0	0.60	ug/L			07/16/22 16:02	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			07/16/22 16:02	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			07/16/22 16:02	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			07/16/22 16:02	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			07/16/22 16:02	1
1,2-Dichlorobenzene	ND		1.0	0.36	ug/L			07/16/22 16:02	1
1,3-Dichlorobenzene	ND		1.0	0.50	ug/L			07/16/22 16:02	1
1,4-Dichlorobenzene	ND		1.0	0.54	ug/L			07/16/22 16:02	1
2-Chloroethyl vinyl ether	ND		2.0	1.7	ug/L			07/16/22 16:02	1
Acrolein	ND		20	16	ug/L			07/16/22 16:02	1
Acrylonitrile	ND	*+	20	7.8	ug/L			07/16/22 16:02	1
Benzene	ND		1.0	0.60	ug/L			07/16/22 16:02	1
Bromoform	ND	*+	1.0	0.98	ug/L			07/16/22 16:02	1
Bromomethane	ND		1.0	0.89	ug/L			07/16/22 16:02	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			07/16/22 16:02	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/16/22 16:02	1
Chloroform	ND		1.0	0.60	ug/L			07/16/22 16:02	1
Chloromethane	ND		1.0	0.90	ug/L			07/16/22 16:02	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			07/16/22 16:02	1
Ethylbenzene	ND		1.0	0.51	ug/L			07/16/22 16:02	1
Methylene Chloride	ND		1.0	0.89	ug/L			07/16/22 16:02	1
Tetrachloroethene	ND		1.0	0.47	ug/L			07/16/22 16:02	1
Toluene	ND	*-	1.0	0.46	ug/L			07/16/22 16:02	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			07/16/22 16:02	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			07/16/22 16:02	1
Trichloroethene	ND		1.0	0.69	ug/L			07/16/22 16:02	1
Vinyl chloride	ND		1.0	0.40	ug/L			07/16/22 16:02	1
Dibromochloromethane	ND		1.0	0.84	ug/L			07/16/22 16:02	1
Bromodichloromethane	ND		1.0	0.64	ug/L			07/16/22 16:02	1
Chloroethane	ND		1.0	0.90	ug/L			07/16/22 16:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	120		28 - 163					07/16/22 16:02	1
4-Bromofluorobenzene (Surr)	83		41 - 122					07/16/22 16:02	1
Toluene-d8 (Surr)	54		53 - 125					07/16/22 16:02	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	0.73	J	1.0	0.57	ug/L			07/19/22 22:42	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	167	S1+	28 - 163					07/19/22 22:42	1
4-Bromofluorobenzene (Surr)	110		41 - 122					07/19/22 22:42	1
Toluene-d8 (Surr)	69		53 - 125					07/19/22 22:42	1
Dibromofluoromethane (Surr)	143		59 - 168					07/19/22 22:42	1

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Eurofins Pittsburgh

07/16/22 16:02

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Client: ARCADIS U.S., Inc.

Job ID: 180-141418-1

Project/Site: Cytec Havre de Grace MD

Client Sample ID: EFFLUENT (071522)

Date Collected: 07/15/22 09:45

Date Received: 07/16/22 09:30

Lab Sample ID: 180-141418-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	3.0	ug/L			07/16/22 16:28	5
1,1,2,2-Tetrachloroethane	ND	*+	5.0	3.0	ug/L			07/16/22 16:28	5
1,1,2-Trichloroethane	ND		5.0	2.3	ug/L			07/16/22 16:28	5
1,1-Dichloroethane	ND		5.0	1.5	ug/L			07/16/22 16:28	5
1,1-Dichloroethene	ND		5.0	2.8	ug/L			07/16/22 16:28	5
1,2-Dichloropropane	ND		5.0	3.3	ug/L			07/16/22 16:28	5
1,2-Dichlorobenzene	ND		5.0	1.8	ug/L			07/16/22 16:28	5
1,3-Dichlorobenzene	ND		5.0	2.5	ug/L			07/16/22 16:28	5
1,4-Dichlorobenzene	ND		5.0	2.7	ug/L			07/16/22 16:28	5
2-Chloroethyl vinyl ether	ND		10	8.6	ug/L			07/16/22 16:28	5
Acrolein	ND		100	80	ug/L			07/16/22 16:28	5
Acrylonitrile	ND	*+	100		ug/L			07/16/22 16:28	5
Benzene	ND		5.0	3.0	ug/L			07/16/22 16:28	5
Bromoform	ND	*+	5.0	4.9	ug/L			07/16/22 16:28	5
Bromomethane	ND		5.0	4.4	ug/L			07/16/22 16:28	5
Carbon tetrachloride	ND		5.0	4.4	ug/L			07/16/22 16:28	5
Chlorobenzene	ND		5.0	2.5	ug/L			07/16/22 16:28	5
Chloroform	ND		5.0	3.0	ug/L			07/16/22 16:28	5
Chloromethane	ND		5.0	4.5	ug/L			07/16/22 16:28	5
cis-1,3-Dichloropropene	ND		5.0	3.0	ug/L			07/16/22 16:28	5
Ethylbenzene	ND		5.0	2.5	ug/L			07/16/22 16:28	5
Methylene Chloride	ND		5.0	4.4	ug/L			07/16/22 16:28	5
Tetrachloroethene	ND		5.0	2.3	ug/L			07/16/22 16:28	5
Toluene	ND	*_	5.0	2.3	ug/L			07/16/22 16:28	5
trans-1,2-Dichloroethene	ND		5.0		ug/L			07/16/22 16:28	5
trans-1,3-Dichloropropene	ND		5.0	2.9	ug/L			07/16/22 16:28	5
Trichloroethene	ND		5.0	3.4	ug/L			07/16/22 16:28	5
Vinyl chloride	ND		5.0	2.0	ug/L			07/16/22 16:28	5
Dibromochloromethane	ND		5.0	4.2	ug/L			07/16/22 16:28	5
Bromodichloromethane	ND		5.0	3.2	ug/L			07/16/22 16:28	5
Chloroethane	ND		5.0	4.5	ug/L			07/16/22 16:28	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	138		28 - 163			-		07/16/22 16:28	5
4-Bromofluorobenzene (Surr)	101		41 - 122					07/16/22 16:28	5
Toluene-d8 (Surr)	68		53 - 125					07/16/22 16:28	5
Dibromofluoromethane (Surr)	106		59 - 168					07/16/22 16:28	5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	160		5.0	2.9	ug/L			07/19/22 23:08	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	134		28 - 163					07/19/22 23:08	5
4-Bromofluorobenzene (Surr)	106		41 - 122					07/19/22 23:08	5
Toluene-d8 (Surr)	66		53 - 125					07/19/22 23:08	5
Dibromofluoromethane (Surr)	112		59 - 168					07/19/22 23:08	5

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Client: ARCADIS U.S., Inc. Job ID: 180-141418-1

Project/Site: Cytec Havre de Grace MD

Client Sample ID: TRIP BLANK

Date Collected: 07/15/22 00:01 Date Received: 07/16/22 09:30 Lab Sample ID: 180-141418-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			07/16/22 16:55	1
1,1,2,2-Tetrachloroethane	ND	*+	1.0	0.60	ug/L			07/16/22 16:55	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			07/16/22 16:55	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			07/16/22 16:55	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			07/16/22 16:55	1
1,2-Dichloroethane	ND	*+	1.0	0.57	ug/L			07/16/22 16:55	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			07/16/22 16:55	1
1,2-Dichlorobenzene	ND		1.0	0.36	ug/L			07/16/22 16:55	1
1,3-Dichlorobenzene	ND		1.0	0.50	ug/L			07/16/22 16:55	1
1,4-Dichlorobenzene	ND		1.0	0.54	ug/L			07/16/22 16:55	1
2-Chloroethyl vinyl ether	ND		2.0	1.7	ug/L			07/16/22 16:55	1
Acrolein	ND		20	16	ug/L			07/16/22 16:55	1
Acrylonitrile	ND	*+	20	7.8	ug/L			07/16/22 16:55	1
Benzene	ND		1.0	0.60	ug/L			07/16/22 16:55	1
Bromoform	ND	*+	1.0	0.98	ug/L			07/16/22 16:55	1
Bromomethane	ND		1.0	0.89	ug/L			07/16/22 16:55	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			07/16/22 16:55	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/16/22 16:55	1
Chloroform	ND		1.0	0.60	ug/L			07/16/22 16:55	1
Chloromethane	ND		1.0	0.90	ug/L			07/16/22 16:55	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			07/16/22 16:55	1
Ethylbenzene	ND		1.0	0.51	ug/L			07/16/22 16:55	1
Methylene Chloride	ND		1.0	0.89	ug/L			07/16/22 16:55	1
Tetrachloroethene	ND		1.0	0.47				07/16/22 16:55	1
Toluene	ND	*_	1.0	0.46	ug/L			07/16/22 16:55	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			07/16/22 16:55	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			07/16/22 16:55	1
Trichloroethene	ND		1.0	0.69	ug/L			07/16/22 16:55	1
Vinyl chloride	ND		1.0	0.40	-			07/16/22 16:55	1
Dibromochloromethane	ND		1.0	0.84	ug/L			07/16/22 16:55	1
Bromodichloromethane	ND		1.0	0.64	ug/L			07/16/22 16:55	1
Chloroethane	ND		1.0	0.90	ug/L			07/16/22 16:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	154		28 - 163			·		07/16/22 16:55	1
4-Bromofluorobenzene (Surr)	113		41 - 122					07/16/22 16:55	1
Toluene-d8 (Surr)	76		53 - 125					07/16/22 16:55	1
Dibromofluoromethane (Surr)	121		59 - 168					07/16/22 16:55	1

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Job ID: 180-141418-1 Project/Site: Cytec Havre de Grace MD

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

MB MB

Lab Sample ID: MB 180-405301/7

Matrix: Water

Analysis Batch: 405301

Client Sample ID: Method Blank

Prep Type: Total/NA

	INID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			07/16/22 14:08	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.60	ug/L			07/16/22 14:08	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			07/16/22 14:08	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			07/16/22 14:08	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			07/16/22 14:08	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			07/16/22 14:08	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			07/16/22 14:08	1
1,2-Dichlorobenzene	ND		1.0	0.36	ug/L			07/16/22 14:08	1
1,3-Dichlorobenzene	ND		1.0	0.50	ug/L			07/16/22 14:08	1
1,4-Dichlorobenzene	ND		1.0	0.54	ug/L			07/16/22 14:08	1
2-Chloroethyl vinyl ether	ND		2.0	1.7	ug/L			07/16/22 14:08	1
Acrolein	ND		20	16	ug/L			07/16/22 14:08	1
Acrylonitrile	ND		20	7.8	ug/L			07/16/22 14:08	1
Benzene	ND		1.0	0.60	ug/L			07/16/22 14:08	1
Bromoform	ND		1.0	0.98	ug/L			07/16/22 14:08	1
Bromomethane	ND		1.0	0.89	ug/L			07/16/22 14:08	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			07/16/22 14:08	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/16/22 14:08	1
Chloroform	ND		1.0	0.60	ug/L			07/16/22 14:08	1
Chloromethane	ND		1.0	0.90	ug/L			07/16/22 14:08	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			07/16/22 14:08	1
Ethylbenzene	ND		1.0	0.51	ug/L			07/16/22 14:08	1
Methylene Chloride	ND		1.0	0.89	ug/L			07/16/22 14:08	1
Tetrachloroethene	ND		1.0	0.47	ug/L			07/16/22 14:08	1
Toluene	ND		1.0	0.46	ug/L			07/16/22 14:08	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			07/16/22 14:08	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			07/16/22 14:08	1
Trichloroethene	ND		1.0	0.69	ug/L			07/16/22 14:08	1
Vinyl chloride	ND		1.0	0.40	ug/L			07/16/22 14:08	1
Dibromochloromethane	ND		1.0	0.84	ug/L			07/16/22 14:08	1
Bromodichloromethane	ND		1.0	0.64	ug/L			07/16/22 14:08	1
Chloroethane	ND		1.0		ug/L			07/16/22 14:08	1
					-				

Surrogate	%Recovery	Qualifier Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	149	28 - 163		07/16/22 14:08	1
4-Bromofluorobenzene (Surr)	108	41 - 122		07/16/22 14:08	1
Toluene-d8 (Surr)	65	53 - 125		07/16/22 14:08	1
Dibromofluoromethane (Surr)	117	59 - 168		07/16/22 14:08	1

Lab Sample ID: LCS 180-405301/5

Matrix: Water

Analysis Batch: 405301

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1,1-Trichloroethane	10.0	12.4		ug/L		124	70 - 130	
1,1,2,2-Tetrachloroethane	10.0	17.1	*+	ug/L		171	60 - 140	
1,1,2-Trichloroethane	10.0	12.9		ug/L		129	70 - 130	
1,1-Dichloroethane	10.0	9.43		ug/L		94	70 - 130	

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Prep Type: Total/NA

Client Sample ID: Lab Control Sample

8/9/2022

Job ID: 180-141418-1 Project/Site: Cytec Havre de Grace MD

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-405301/5

Matrix: Water

Analysis Batch: 405301

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

LCS LCS Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits 1,1-Dichloroethene 10.0 9.16 92 50 - 150 ug/L 1,2-Dichloroethane 10.0 15.1 ug/L 151 70 - 13010.0 1,2-Dichloropropane 8.75 ug/L 87 35 - 165 1,2-Dichlorobenzene 10.0 8.36 ug/L 84 65 - 135 10.0 8.09 81 70 - 130 1,3-Dichlorobenzene ug/L 1,4-Dichlorobenzene 10.0 8.40 ug/L 84 65 - 1352-Chloroethyl vinyl ether 20.0 22.0 ug/L 110 10 - 17030.0 Acrolein 27.1 ug/L 90 60 - 140Acrylonitrile 100 242 *+ ug/L 242 60 - 140Benzene 88 10.0 8.76 ug/L 65 - 135Bromoform 10.0 172 17.2 *+ ug/L 70 - 130 Bromomethane 10.0 9.63 ug/L 96 15 - 170 Carbon tetrachloride 10.0 112 70 - 130 11.2 ug/L 10.0 Chlorobenzene 9.37 ug/L 94 65 - 135 Chloroform 10.0 11.4 ug/L 114 70 - 135 10.0 114 Chloromethane 114 ug/L 10 - 170 cis-1,3-Dichloropropene 10.0 13.8 ug/L 138 25 - 170 Ethylbenzene 10.0 7.57 76 60 - 140 ug/L Methylene Chloride 10.0 9.83 ug/L 98 60 - 140 Tetrachloroethene 10.0 7.30 ug/L 73 70 - 130 Toluene 10.0 6.97 ug/L 70 70 - 130

10.0

10.0

10.0

10.0

10.0

10.0

10.0

9.38

12.9

9.42

8.24

11.6

12.3

8.88

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

94

129

94

82

116

123

89

70 - 130

50 - 150

65 - 135

10 - 170

70 - 135

65 - 135

40 - 160

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	136		28 - 163
4-Bromofluorobenzene (Surr)	105		41 - 122
Toluene-d8 (Surr)	63		53 - 125
Dibromofluoromethane (Surr)	105		59 - 168

Lab Sample ID: MB 180-405464/13

Matrix: Water

trans-1.2-Dichloroethene

trans-1,3-Dichloropropene

Dibromochloromethane

Bromodichloromethane

Trichloroethene

Vinyl chloride

Chloroethane

Analysis Batch: 405464

Client Sample ID: Method Blank

Prep Type: Total/NA

MD MD

	MR MR							
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND ND	1.0	0.60	ug/L			07/19/22 13:51	1
1,1,2,2-Tetrachloroethane	ND	1.0	0.60	ug/L			07/19/22 13:51	1
1,1,2-Trichloroethane	ND	1.0	0.45	ug/L			07/19/22 13:51	1
1,1-Dichloroethane	ND	1.0	0.31	ug/L			07/19/22 13:51	1
1,1-Dichloroethene	ND	1.0	0.55	ug/L			07/19/22 13:51	1
1,2-Dichloroethane	ND	1.0	0.57	ug/L			07/19/22 13:51	1
1,2-Dichloropropane	ND	1.0	0.66	ug/L			07/19/22 13:51	1
1,2-Dichlorobenzene	ND	1.0	0.36	ug/L			07/19/22 13:51	1
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Project/Site: Cytec Havre de Grace MD

Job ID: 180-141418-1

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-405464/13

Matrix: Water

Analysis Batch: 405464

Client Sample ID: Method Blank

Prep Type: Total/NA

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	ND		1.0	0.50	ug/L			07/19/22 13:51	1
1,4-Dichlorobenzene	ND		1.0	0.54	ug/L			07/19/22 13:51	1
2-Chloroethyl vinyl ether	ND		2.0	1.7	ug/L			07/19/22 13:51	1
Acrolein	ND		20	16	ug/L			07/19/22 13:51	1
Acrylonitrile	ND		20	7.8	ug/L			07/19/22 13:51	1
Benzene	ND		1.0	0.60	ug/L			07/19/22 13:51	1
Bromoform	ND		1.0	0.98	ug/L			07/19/22 13:51	1
Bromomethane	ND		1.0	0.89	ug/L			07/19/22 13:51	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			07/19/22 13:51	1
Chlorobenzene	ND		1.0	0.50	ug/L			07/19/22 13:51	1
Chloroform	ND		1.0	0.60	ug/L			07/19/22 13:51	1
Chloromethane	ND		1.0	0.90	ug/L			07/19/22 13:51	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			07/19/22 13:51	1
Ethylbenzene	ND		1.0	0.51	ug/L			07/19/22 13:51	1
Methylene Chloride	ND		1.0	0.89	ug/L			07/19/22 13:51	1
Tetrachloroethene	ND		1.0	0.47	ug/L			07/19/22 13:51	1
Toluene	ND		1.0	0.46	ug/L			07/19/22 13:51	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			07/19/22 13:51	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			07/19/22 13:51	1
Trichloroethene	ND		1.0	0.69	ug/L			07/19/22 13:51	1
Vinyl chloride	ND		1.0	0.40	ug/L			07/19/22 13:51	1
Dibromochloromethane	ND		1.0	0.84	ug/L			07/19/22 13:51	1
Bromodichloromethane	ND		1.0	0.64	ug/L			07/19/22 13:51	1
Chloroethane	ND		1.0	0.90	ug/L			07/19/22 13:51	1

	MB	MB
rrogate	%Recovery	Qua

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	141		28 - 163		07/19/22 13:51	1
4-Bromofluorobenzene (Surr)	108		41 - 122		07/19/22 13:51	1
Toluene-d8 (Surr)	69		53 - 125		07/19/22 13:51	1
Dibromofluoromethane (Surr)	119		59 - 168		07/19/22 13:51	1

Lab Sample ID: LCS 180-405464/11

Matrix: Water

Analysis Batch: 405464

Client Sample ID: Lab Control Sample Prep Type: Total/NA

-	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
1,1,1-Trichloroethane	10.0	11.1		ug/L		111	70 - 130
1,1,2,2-Tetrachloroethane	10.0	12.4		ug/L		124	60 - 140
1,1,2-Trichloroethane	10.0	9.83		ug/L		98	70 - 130
1,1-Dichloroethane	10.0	7.82		ug/L		78	70 - 130
1,1-Dichloroethene	10.0	8.81		ug/L		88	50 - 150
1,2-Dichloroethane	10.0	11.1		ug/L		111	70 - 130
1,2-Dichloropropane	10.0	6.95		ug/L		70	35 - 165
1,2-Dichlorobenzene	10.0	7.30		ug/L		73	65 - 135
1,3-Dichlorobenzene	10.0	7.24		ug/L		72	70 - 130
1,4-Dichlorobenzene	10.0	7.22		ug/L		72	65 - 135
2-Chloroethyl vinyl ether	20.0	19.4		ug/L		97	10 - 170
Acrolein	30.0	19.3	J	ug/L		64	60 - 140

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Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Job ID: 180-141418-1

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-405464/11

Matrix: Water

Analysis Batch: 405464

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Allaryolo Batolli 400404						
	Spike	LCS	LCS			%Rec
Analyte	Added	Result	Qualifier	Unit	D %Rec	Limits
Acrylonitrile	100	167	*+	ug/L	167	60 - 140
Benzene	10.0	7.56		ug/L	76	65 - 135
Bromoform	10.0	13.5	*+	ug/L	135	70 - 130
Bromomethane	10.0	8.49		ug/L	85	15 - 170
Carbon tetrachloride	10.0	10.5		ug/L	105	70 - 130
Chlorobenzene	10.0	8.34		ug/L	83	65 - 135
Chloroform	10.0	9.54		ug/L	95	70 - 135
Chloromethane	10.0	9.92		ug/L	99	10 - 170
cis-1,3-Dichloropropene	10.0	11.1		ug/L	111	25 - 170
Ethylbenzene	10.0	6.98		ug/L	70	60 - 140
Methylene Chloride	10.0	7.32		ug/L	73	60 - 140
Tetrachloroethene	10.0	7.61		ug/L	76	70 - 130
Toluene	10.0	6.22	*_	ug/L	62	70 - 130
trans-1,2-Dichloroethene	10.0	8.32		ug/L	83	70 - 130
trans-1,3-Dichloropropene	10.0	10.0		ug/L	100	50 - 150
Trichloroethene	10.0	8.98		ug/L	90	65 - 135
Vinyl chloride	10.0	7.90		ug/L	79	10 - 170
Dibromochloromethane	10.0	9.50		ug/L	95	70 - 135
Bromodichloromethane	10.0	9.42		ug/L	94	65 - 135
Chloroethane	10.0	8.59		ug/L	86	40 - 160

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	122		28 - 163
4-Bromofluorobenzene (Surr)	105		41 - 122
Toluene-d8 (Surr)	66		53 - 125
Dibromofluoromethane (Surr)	99		59 - 168

QC Association Summary

Client: ARCADIS U.S., Inc. Job ID: 180-141418-1

Project/Site: Cytec Havre de Grace MD

GC/MS VOA

Analysis Batch: 405301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-141418-1	EW-1 (071522)	Total/NA	Water	EPA 624.1	
180-141418-2	MW10D (071522)	Total/NA	Water	EPA 624.1	
180-141418-3	EFFLUENT (071522)	Total/NA	Water	EPA 624.1	
180-141418-4	TRIP BLANK	Total/NA	Water	EPA 624.1	
MB 180-405301/7	Method Blank	Total/NA	Water	EPA 624.1	
LCS 180-405301/5	Lab Control Sample	Total/NA	Water	EPA 624.1	

Analysis Batch: 405464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-141418-1 - RADL	EW-1 (071522)	Total/NA	Water	EPA 624.1	_ ·
180-141418-2 - RA	MW10D (071522)	Total/NA	Water	EPA 624.1	
180-141418-3 - RA	EFFLUENT (071522)	Total/NA	Water	EPA 624.1	
MB 180-405464/13	Method Blank	Total/NA	Water	EPA 624.1	
LCS 180-405464/11	Lab Control Sample	Total/NA	Water	EPA 624.1	

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 180-141418-1

Login Number: 141418 List Source: Eurofins Pittsburgh

List Number: 1

Creator: Abernathy, Eric L

oreator. Abernatiny, Eric E		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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Environment Testing

ANALYTICAL REPORT

Eurofins Pittsburgh 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 Tel: (412)963-7058

Laboratory Job ID: 180-146141-1

Client Project/Site: Cytec Havre de Grace MD

For:

ARCADIS U.S., Inc. 7550 Teague Road Suite 210 Hanover, Maryland 21076

Attn: Ms. Shwetha Sridharan



Authorized for release by: 11/3/2022 3:48:54 PM

Jill Colussy, Project Manager I (412)963-2444

Jill.Colussy@et.eurofinsus.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

PA Lab ID: 02-00416

Client: ARCADIS U.S., Inc. Project/Site: Cytec Havre de Grace MD Laboratory Job ID: 180-146141-1

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Case Narrative

Client: ARCADIS U.S., Inc.

Job ID: 180-146141-1 Project/Site: Cytec Havre de Grace MD

Job ID: 180-146141-1

Laboratory: Eurofins Pittsburgh

Narrative

Job Narrative 180-146141-1

Receipt

The samples were received on 10/13/2022 10:40 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.2° C.

The laboratory did not receive the TRIP BLANK listed on the chain of custody.

GC/MS VOA

The preservative used in the sample containers provided is not compatible with the Method 624 analytes requested. The following sample was received preserved with hydrochloric acid: POTWOUTFALL (101222) (180-146141-1). The requested target analyte list contains 2-Chloroethyl vinyl ether and/or Acrolein, which are acid-labile compounds that degrade in an acidic medium.

Due to the concentration of target compounds detected, sample POTWOUTFALL (101222) (180-146141-1) was analyzed at a dilution. Elevated reporting limits (RLs) are provided.

The laboratory control sample (LCS) for batch 180-415073 recovered outside control limits for 1,1,2,2-Tetrachloroethane, 1,1-Dichloroethane and 1,1-Dichloroethene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

GC/MS Semi VOA

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

The associated samples are included in 11 analyses between CCV/CCB. The bracketing QC was within the control limits. Data will be reported as is with this narrative.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 180-146141-1

Project/Site: Cytec Havre de Grace MD

Qualifiers

GC/MS VOA

Qualifier Qualifier Description

*+ LCS and/or LCSD is outside acceptance limits, high biased.

GC/MS Semi VOA

Qualifier Qualifier Description

F1 MS and/or MSD recovery exceeds control limits.

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier Qualifier Description

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
CFU Colony Forming Unit
CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
MPN Most Probable Number
MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive
QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

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Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.

Job ID: 180-146141-1

Project/Site: Cytec Havre de Grace MD

Laboratory: Eurofins Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-22 *
California	State	2891	04-30-23
Connecticut	State	PH-0688	09-30-22 *
Florida	NELAP	E871008	06-30-23
Georgia	State	PA 02-00416	04-30-23
Illinois	NELAP	004375	06-30-23
Kansas	NELAP	E-10350	03-31-23
Kentucky (UST)	State	162013	04-30-23
Kentucky (WW)	State	KY98043	12-31-22
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	06-30-23
Maine	State	PA00164	03-06-24
Minnesota	NELAP	042-999-482	12-31-22
New Hampshire	NELAP	2030	04-04-23
New Jersey	NELAP	PA005	06-30-23
New York	NELAP	11182	04-01-23
North Carolina (WW/SW)	State	434	12-31-22
North Dakota	State	R-227	04-30-23
Oregon	NELAP	PA-2151	02-07-23
Pennsylvania	NELAP	02-00416	04-30-23
Rhode Island	State	LAO00362	12-31-22
South Carolina	State	89014	04-20-23
Texas	NELAP	T104704528	03-31-23
JSDA	US Federal Programs	P330-16-00211	06-21-24
Utah	NELAP	PA001462019-8	05-31-23
√irginia	NELAP	10043	10-31-22
West Virginia DEP	State	142	01-31-23
Wisconsin	State	998027800	08-31-23

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 $^{^{\}star}\,\text{Accreditation/Certification renewal pending - accreditation/certification considered valid}.$

Eurofins Pittsburgh

Sample Summary

Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Job ID: 180-146141-1

 Lab Sample ID
 Client Sample ID
 Matrix
 Collected
 Received

 180-146141-1
 POTWOUTFALL (101222)
 Water
 10/12/22 10:30
 10/13/22 10:40

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Method Summary

Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Method **Method Description** Protocol Laboratory EPA 624.1 Volatile Organic Compounds (GC/MS) 40CFR136A **EET PIT** 40 CFR 761 EPA 625.1 Semivolatile Organic Compounds (GC/MS) **EET PIT** EPA 200.7 Rev 4 Metals (ICP) **EPA EET PIT** EPA 245.1 Rev. Mercury (CVAA) EPA **EET PIT** SM 4500CN E Total Cyanide SM **EET PIT** 200.7 Preparation, Total Recoverable Metals EPA **EET PIT** Preparation, Mercury 245.1 EPA EET PIT 625 Liquid-Liquid Extraction 40CFR136A **EET PIT** SM 4500 CN C Cyanide, Distillation SM **EET PIT**

Protocol References:

40 CFR 761 = Toxic Substances Control Act (TSCA)

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Job ID: 180-146141-1

Lab Chronicle

Client: ARCADIS U.S., Inc. Job ID: 180-146141-1

Project/Site: Cytec Havre de Grace MD

Client Sample ID: POTWOUTFALL (101222)

Lab Sample ID: 180-146141-1 Date Collected: 10/12/22 10:30 **Matrix: Water**

Date Received: 10/13/22 10:40

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumer	EPA 624.1 nt ID: CHHP6		2	5 mL	5 mL	415073	10/14/22 15:18	J1T	EET PIT
Total/NA	Prep	625			250 mL	250 uL	415298	10/17/22 11:51	BJT	EET PIT
Total/NA	Analysis Instrumer	EPA 625.1 nt ID: CH71		1	1 mL	1 mL	415666	10/20/22 16:33	VVP	EET PIT
Total Recoverable	Prep	200.7			25 mL	25 mL	416128	10/25/22 11:45	HCY	EET PIT
Total Recoverable	Analysis Instrumer	EPA 200.7 Rev 4 at ID: C		1			416359	10/27/22 02:56	RJG	EET PIT
Total/NA	Prep	245.1			25 mL	25 mL	416511	10/28/22 06:47	RJR	EET PIT
Total/NA	Analysis Instrumer	EPA 245.1 Rev. at ID: HGY		1			416617	10/28/22 14:13	RJR	EET PIT
Total/NA	Prep	SM 4500 CN C			6 mL	6 mL	416138	10/25/22 13:45	CMR	EET PIT
Total/NA	Analysis Instrumer	SM 4500CN E at ID: SEAL1		1			416228	10/25/22 16:54	CMR	EET PIT

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: EET PIT

Batch Type: Prep

BJT = Bill Trout

CMR = Carl Reagle

HCY = Harrison Yaeger

RJR = Ron Rosenbaum

Batch Type: Analysis

CMR = Carl Reagle

J1T = Jianwu Tang

RJG = Rob Good

RJR = Ron Rosenbaum

VVP = Vincent Piccolino

Eurofins Pittsburgh

11/3/2022

Client Sample ID: POTWOUTFALL (101222)

Date Collected: 10/12/22 10:30 Date Received: 10/13/22 10:40 Lab Sample ID: 180-146141-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.0	1.2	ug/L			10/14/22 15:18	2
1,1,2,2-Tetrachloroethane	ND	*+	2.0	1.2	ug/L			10/14/22 15:18	2
1,1,2-Trichloroethane	ND		2.0	0.91	ug/L			10/14/22 15:18	2
1,1-Dichloroethane	ND	*+	2.0	0.61	ug/L			10/14/22 15:18	2
1,1-Dichloroethene	ND	*+	2.0	1.1	ug/L			10/14/22 15:18	2
1,2-Dichloroethane	63		2.0	1.1	ug/L			10/14/22 15:18	2
1,2-Dichloropropane	ND		2.0	1.3	ug/L			10/14/22 15:18	2
1,2-Dichlorobenzene	ND		2.0	0.73	ug/L			10/14/22 15:18	2
1,3-Dichlorobenzene	ND		2.0	1.0	ug/L			10/14/22 15:18	2
1,4-Dichlorobenzene	ND		2.0	1.1	ug/L			10/14/22 15:18	2
2-Chloroethyl vinyl ether	ND		4.0	3.4	ug/L			10/14/22 15:18	2
Acrolein	ND		40	32	ug/L			10/14/22 15:18	2
Acrylonitrile	ND		40	16	ug/L			10/14/22 15:18	2
Benzene	ND		2.0	1.2	ug/L			10/14/22 15:18	2
Bromoform	ND		2.0	2.0	ug/L			10/14/22 15:18	2
Bromomethane	ND		2.0	1.8	ug/L			10/14/22 15:18	2
Carbon tetrachloride	ND		2.0	1.8	ug/L			10/14/22 15:18	2
Chlorobenzene	ND		2.0	1.0	ug/L			10/14/22 15:18	2
Chloroform	ND		2.0	1.2	ug/L			10/14/22 15:18	2
Chloromethane	ND		2.0	1.8	ug/L			10/14/22 15:18	2
cis-1,3-Dichloropropene	ND		2.0	1.2	ug/L			10/14/22 15:18	2
Ethylbenzene	ND		2.0	1.0	ug/L			10/14/22 15:18	2
Methylene Chloride	ND		2.0	1.8	ug/L			10/14/22 15:18	2
Tetrachloroethene	ND		2.0	0.93	ug/L			10/14/22 15:18	2
Toluene	ND		2.0	0.91	ug/L			10/14/22 15:18	2
trans-1,2-Dichloroethene	3.4		2.0	1.3	ug/L			10/14/22 15:18	2
trans-1,3-Dichloropropene	ND		2.0	1.2	ug/L			10/14/22 15:18	2
Trichloroethene	4.4		2.0	1.4	ug/L			10/14/22 15:18	2
Vinyl chloride	10		2.0	0.80	ug/L			10/14/22 15:18	2
Dibromochloromethane	ND		2.0	1.7	ug/L			10/14/22 15:18	2
Bromodichloromethane	ND		2.0	1.3	ug/L			10/14/22 15:18	2
Chloroethane	ND		2.0	1.8	ug/L			10/14/22 15:18	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		28 - 163			=		10/14/22 15:18	2
4-Bromofluorobenzene (Surr)	61		41 - 122					10/14/22 15:18	2
Toluene-d8 (Surr)	99		53 - 125					10/14/22 15:18	2
Dibromofluoromethane (Surr)	118		59 - 168					10/14/22 15:18	2

Analyte	Result Q	ualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	ND ND		0.19	0.065	ug/L		10/17/22 11:51	10/20/22 16:33	1
Acenaphthene	ND		0.19	0.065	ug/L		10/17/22 11:51	10/20/22 16:33	1
Anthracene	ND		0.19	0.049	ug/L		10/17/22 11:51	10/20/22 16:33	1
Benzidine	ND F1	1	20	9.1	ug/L		10/17/22 11:51	10/20/22 16:33	1
Benzo[a]anthracene	ND		0.19	0.075	ug/L		10/17/22 11:51	10/20/22 16:33	1
Benzo[b]fluoranthene	ND		0.19	0.097	ug/L		10/17/22 11:51	10/20/22 16:33	1
Benzo[k]fluoranthene	ND		0.19	0.088	ug/L		10/17/22 11:51	10/20/22 16:33	1
Benzo[g,h,i]perylene	ND		0.19	0.069	ug/L		10/17/22 11:51	10/20/22 16:33	1
Benzo[a]pyrene	ND		0.19	0.053	ug/L		10/17/22 11:51	10/20/22 16:33	1

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Client: ARCADIS U.S., Inc. Job ID: 180-146141-1

Project/Site: Cytec Havre de Grace MD

Client Sample ID: POTWOUTFALL (101222)

Lab Sample ID: 180-146141-1 Date Collected: 10/12/22 10:30 **Matrix: Water**

Date Received: 10/13/22 10:40

2-Fluorophenol

Method: 40 CFR 761 EPA 625.1 - Semivolatile	Organic Compounds (GC/MS) (Continued)
---	---------------------------------------

Analyte	Result	Qualifier	RL	MDL		D Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	ND		0.19	0.040	ug/L	10/17/22 11:51	10/20/22 16:33	1
Bis(2-ethylhexyl) phthalate	ND		10	6.2	ug/L	10/17/22 11:51	10/20/22 16:33	1
4-Bromophenyl phenyl ether	ND		1.0	0.32	ug/L	10/17/22 11:51	10/20/22 16:33	1
Butyl benzyl phthalate	ND		1.0	0.46	ug/L	10/17/22 11:51	10/20/22 16:33	1
4-Chloro-3-methylphenol	ND		1.0	0.28	ug/L	10/17/22 11:51	10/20/22 16:33	1
2-Chloronaphthalene	ND	F1	0.19	0.059	ug/L	10/17/22 11:51	10/20/22 16:33	1
2-Chlorophenol	ND		1.0	0.13	ug/L	10/17/22 11:51	10/20/22 16:33	1
Chrysene	ND		0.19	0.081	ug/L	10/17/22 11:51	10/20/22 16:33	1
Dibenzo(a,h)-anthracene	ND		0.19	0.072	ug/L	10/17/22 11:51	10/20/22 16:33	1
Di-n-butyl phthalate	ND		1.0	0.74	ug/L	10/17/22 11:51	10/20/22 16:33	1
3,3'-Dichlorobenzidine	ND		1.0	0.58	ug/L	10/17/22 11:51	10/20/22 16:33	1
2,4-Dichlorophenol	ND		0.19	0.051	ug/L	10/17/22 11:51	10/20/22 16:33	1
Diethyl phthalate	ND		1.0	0.57	ug/L	10/17/22 11:51	10/20/22 16:33	1
2,4-Dimethylphenol	ND		1.0	0.17	ug/L	10/17/22 11:51	10/20/22 16:33	1
Dimethyl phthalate	ND		1.0	0.20	-	10/17/22 11:51	10/20/22 16:33	1
4,6-Dinitro-2-methylphenol	ND		5.0		ug/L		10/20/22 16:33	1
2,4-Dinitrophenol	ND		10		ug/L	10/17/22 11:51	10/20/22 16:33	1
2,4-Dinitrotoluene	ND		1.0	0.35	-		10/20/22 16:33	1
2,6-Dinitrotoluene	ND		1.0	0.17		10/17/22 11:51	10/20/22 16:33	1
Di-n-octyl phthalate	ND		1.0	0.69	•	10/17/22 11:51	10/20/22 16:33	1
Fluoranthene	ND		0.19	0.060	•		10/20/22 16:33	1
Fluorene	ND		0.19	0.069			10/20/22 16:33	1
Hexachlorobenzene	ND		0.19	0.056	-		10/20/22 16:33	1
Hexachlorobutadiene	ND		0.19	0.069	ū		10/20/22 16:33	1
Hexachlorocyclopentadiene	ND		1.0	0.50			10/20/22 16:33	· 1
Hexachloroethane	ND		1.0	0.13	_		10/20/22 16:33	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.085	-		10/20/22 16:33	1
Isophorone	ND		1.0	0.19			10/20/22 16:33	
Naphthalene	ND		0.19	0.059	ug/L		10/20/22 16:33	1
Nitrobenzene	ND		2.0	0.50	-		10/20/22 16:33	1
2-Nitrophenol	ND		1.0	0.19			10/20/22 16:33	· · · · · · · 1
4-Nitrophenol	ND		5.0	0.94	-		10/20/22 16:33	1
N-Nitrosodimethylamine	ND		1.0	0.067	•		10/20/22 16:33	1
N-Nitrosodiphenylamine	ND		1.0	0.12			10/20/22 16:33	· · · · · · · · · · · · · · · · · · ·
N-Nitrosodi-n-propylamine	ND.		0.19	0.071	-		10/20/22 16:33	1
2,2'-oxybis[1-chloropropane]	ND.		0.19	0.058	-		10/20/22 16:33	1
Pentachlorophenol	ND		5.0	0.036			10/20/22 16:33	
Phenanthrene					•			•
Phenol	ND ND		0.19 1.0	0.055 0.49	•		10/20/22 16:33 10/20/22 16:33	1
	ND		0.19	0.49			10/20/22 16:33	1 1
Pyrene 1,2,4-Trichlorobenzene	ND ND		1.0				10/20/22 16:33	
				0.13	-			1
2,4,6-Trichlorophenol	ND		1.0	0.22			10/20/22 16:33	1
Bis(2-chloroethoxy)methane	ND		1.0	0.15	-		10/20/22 16:33	1
4-Chlorophenyl phenyl ether	ND	E4	1.0	0.22	-		10/20/22 16:33 10/20/22 16:33	1
1,2-Diphenylhydrazine(as Azobenzene)	ND	ГІ	1.0	0.20	ug/L	10/17/22 11:51	10/20/22 10:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	77		47 - 107			10/17/22 11:51	10/20/22 16:33	1

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10/17/22 11:51 10/20/22 16:33

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Client: ARCADIS U.S., Inc. Job ID: 180-146141-1

Project/Site: Cytec Havre de Grace MD

Client Sample ID: POTWOUTFALL (101222)

Date Collected: 10/12/22 10:30

Date Received: 10/13/22 10:40

Lab Sample ID: 180-146141-1 **Matrix: Water**

Method: 40 CFR 761	EPA 625.1	- Semivolatile	Organic	Compounds	(GC/MS)	(Continued)

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	82	32 - 127	10/17/22 11:51	10/20/22 16:33	1
Nitrobenzene-d5	79	47 - 110	10/17/22 11:51	10/20/22 16:33	1
Phenol-d5	75	37 - 110	10/17/22 11:51	10/20/22 16:33	1
Terphenyl-d14	86	32 - 115	10/17/22 11:51	10/20/22 16:33	1

Method: EF	PA 200.7 Rev 4	Metals (ICP)	- Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10	5.7	ug/L		10/25/22 11:45	10/27/22 02:56	1
Cadmium	ND		5.0	0.33	ug/L		10/25/22 11:45	10/27/22 02:56	1
Chromium	ND		5.0	2.6	ug/L		10/25/22 11:45	10/27/22 02:56	1
Copper	ND		25	3.9	ug/L		10/25/22 11:45	10/27/22 02:56	1
Lead	3.3	J	10	2.3	ug/L		10/25/22 11:45	10/27/22 02:56	1
Nickel	6.3	J	40	2.1	ug/L		10/25/22 11:45	10/27/22 02:56	1
Silver	ND		5.0	0.87	ug/L		10/25/22 11:45	10/27/22 02:56	1
Zinc	ND		20	3.3	ug/L		10/25/22 11:45	10/27/22 02:56	1

Method:	EPA 245.1	Rev N	Mercury ((CVAA)
---------	------------------	-------	-----------	--------

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	0.20	0.13 ug/L		10/28/22 06:47	10/28/22 14:13	1

General Chemistry

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SM 4500CN E)	0.011	0.010	0.0080 mg/L		10/25/22 13:45	10/25/22 16:54	1

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Job ID: 180-146141-1 Project/Site: Cytec Havre de Grace MD

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 180-415073/7

Matrix: Water

Analysis Batch: 415073

Client Sample ID: Method Blank Prep Type: Total/NA

MB MB Result Qualifier RL **MDL** Unit Dil Fac Analyte D Prepared Analyzed 1,1,1-Trichloroethane ND 1.0 0.60 ug/L 10/14/22 13:32 1,1,2,2-Tetrachloroethane ND 1.0 0.60 ug/L 10/14/22 13:32 1,1,2-Trichloroethane ND 1.0 0.45 ug/L 10/14/22 13:32 1,1-Dichloroethane ND 1.0 0.31 ug/L 10/14/22 13:32 1,1-Dichloroethene ND 1.0 0.55 ug/L 10/14/22 13:32 ND 0.57 ug/L 1,2-Dichloroethane 1.0 10/14/22 13:32 ND 10/14/22 13:32 1,2-Dichloropropane 1.0 0.66 ug/L 1,2-Dichlorobenzene ND 1.0 0.36 ug/L 10/14/22 13:32 1,3-Dichlorobenzene ND 1.0 0.50 ug/L 10/14/22 13:32 1,4-Dichlorobenzene ND 1.0 0.54 ug/L 10/14/22 13:32 ND 2-Chloroethyl vinyl ether 2.0 1.7 ug/L 10/14/22 13:32 Acrolein ND 20 16 ug/L 10/14/22 13:32 Acrylonitrile ND 20 7.8 ug/L 10/14/22 13:32 Benzene ND 1.0 0.60 ug/L 10/14/22 13:32 Bromoform ND 1.0 0.98 ug/L 10/14/22 13:32 Bromomethane ND 0.89 ug/L 1.0 10/14/22 13:32 Carbon tetrachloride ND 1.0 0.88 ug/L 10/14/22 13:32 0.50 ug/L 10/14/22 13:32 Chlorobenzene ND 1.0 Chloroform ND 1.0 0.60 ug/L 10/14/22 13:32 Chloromethane ND 1.0 0.90 ug/L 10/14/22 13:32 cis-1,3-Dichloropropene 1.0 0.59 ug/L 10/14/22 13:32 ND ND Ethylbenzene 1.0 0.51 ug/L 10/14/22 13:32 Methylene Chloride ND 1.0 0.89 ug/L 10/14/22 13:32 Tetrachloroethene ND 1.0 10/14/22 13:32 0.47 ug/L Toluene ND 1.0 0.46 ug/L 10/14/22 13:32 trans-1.2-Dichloroethene ND 1.0 0.67 ug/L 10/14/22 13:32 trans-1,3-Dichloropropene ND 1.0 0.58 ug/L 10/14/22 13:32 Trichloroethene ND 1.0 0.69 ug/L 10/14/22 13:32

MB MB

ND

ND

ND

ND

	Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	1,2-Dichloroethane-d4 (Surr)	96		28 - 163		10/14/22 13:32	1
	4-Bromofluorobenzene (Surr)	108		41 - 122	1	10/14/22 13:32	1
	Toluene-d8 (Surr)	122		53 - 125	1	10/14/22 13:32	1
١	Dibromofluoromethane (Surr)	118		59 - 168	1	10/14/22 13:32	1

1.0

1.0

1.0

1.0

0.40 ug/L

0.84 ug/L

0.64 ug/L

0.90 ug/L

Lab Sample ID: LCS 180-415073/5

Matrix: Water

Vinyl chloride

Chloroethane

Dibromochloromethane

Bromodichloromethane

Analysis Batch: 415073

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1,1-Trichloroethane	10.0	9.99		ug/L		100	70 - 130	
1,1,2,2-Tetrachloroethane	10.0	16.1	*+	ug/L		161	60 - 140	
1,1,2-Trichloroethane	10.0	10.1		ug/L		101	70 - 130	
1,1-Dichloroethane	10.0	15.3	*+	ug/L		153	70 - 130	

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Prep Type: Total/NA

10/14/22 13:32

10/14/22 13:32

10/14/22 13:32

10/14/22 13:32

Client Sample ID: Lab Control Sample

Project/Site: Cytec Havre de Grace MD

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-415073/5

Matrix: Water

Analysis Batch: 415073

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Job ID: 180-146141-1

	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
1,1-Dichloroethene	10.0	16.5	*+	ug/L		165	50 - 150
1,2-Dichloroethane	10.0	7.86		ug/L		79	70 - 130
1,2-Dichloropropane	10.0	11.9		ug/L		119	35 - 165
1,2-Dichlorobenzene	10.0	9.05		ug/L		91	65 - 135
1,3-Dichlorobenzene	10.0	8.72		ug/L		87	70 - 130
1,4-Dichlorobenzene	10.0	9.03		ug/L		90	65 - 135
2-Chloroethyl vinyl ether	20.0	15.5		ug/L		77	10 - 170
Acrolein	30.0	29.4		ug/L		98	60 - 140
Acrylonitrile	100	137		ug/L		137	60 - 140
Benzene	10.0	10.1		ug/L		101	65 - 135
Bromoform	10.0	10.6		ug/L		106	70 - 130
Bromomethane	10.0	6.23		ug/L		62	15 - 170
Carbon tetrachloride	10.0	11.3		ug/L		113	70 - 130
Chlorobenzene	10.0	8.22		ug/L		82	65 - 135
Chloroform	10.0	9.67		ug/L		97	70 - 135
Chloromethane	10.0	15.6		ug/L		156	10 - 170
cis-1,3-Dichloropropene	10.0	8.32		ug/L		83	25 - 170
Ethylbenzene	10.0	9.00		ug/L		90	60 - 140
Methylene Chloride	10.0	13.8		ug/L		138	60 - 140
Tetrachloroethene	10.0	9.78		ug/L		98	70 - 130
Toluene	10.0	12.2		ug/L		122	70 - 130
trans-1,2-Dichloroethene	10.0	12.9		ug/L		129	70 - 130
trans-1,3-Dichloropropene	10.0	8.78		ug/L		88	50 - 150
Trichloroethene	10.0	8.52		ug/L		85	65 - 135
Vinyl chloride	10.0	14.4		ug/L		144	10 - 170
Dibromochloromethane	10.0	10.0		ug/L		100	70 - 135
Bromodichloromethane	10.0	8.93		ug/L		89	65 - 135
Chloroethane	10.0	8.18		ug/L		82	40 - 160

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	72		28 - 163
4-Bromofluorobenzene (Surr)	94		41 - 122
Toluene-d8 (Surr)	116		53 - 125
Dibromofluoromethane (Surr)	96		59 - 168

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 180-415298/1-A

Matrix: Water

Analysis Batch: 415666

Client Sample ID: Method Blank Prep Type: Total/NA **Prep Batch: 415298**

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	ND		0.19	0.065	ug/L		10/17/22 11:51	10/20/22 15:50	1
Acenaphthene	ND		0.19	0.065	ug/L		10/17/22 11:51	10/20/22 15:50	1
Anthracene	ND		0.19	0.049	ug/L		10/17/22 11:51	10/20/22 15:50	1
Benzidine	ND		20	9.1	ug/L		10/17/22 11:51	10/20/22 15:50	1
Benzo[a]anthracene	ND		0.19	0.075	ug/L		10/17/22 11:51	10/20/22 15:50	1
Benzo[b]fluoranthene	ND		0.19	0.097	ug/L		10/17/22 11:51	10/20/22 15:50	1
Benzo[k]fluoranthene	ND		0.19	0.088	ug/L		10/17/22 11:51	10/20/22 15:50	1

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Client: ARCADIS U.S., Inc. Job ID: 180-146141-1

Project/Site: Cytec Havre de Grace MD

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-415298/1-A

Matrix: Water

Azobenzene)

Analysis Batch: 415666

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 415298

-	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND		0.19	0.069	ug/L		10/17/22 11:51	10/20/22 15:50	1
Benzo[a]pyrene	ND		0.19	0.053	ug/L		10/17/22 11:51	10/20/22 15:50	1
Bis(2-chloroethyl)ether	ND		0.19	0.040	ug/L		10/17/22 11:51	10/20/22 15:50	1
Bis(2-ethylhexyl) phthalate	ND		10	6.2	ug/L		10/17/22 11:51	10/20/22 15:50	1
4-Bromophenyl phenyl ether	ND		1.0	0.32	ug/L		10/17/22 11:51	10/20/22 15:50	1
Butyl benzyl phthalate	ND		1.0	0.46	ug/L		10/17/22 11:51	10/20/22 15:50	1
4-Chloro-3-methylphenol	ND		1.0	0.28	ug/L		10/17/22 11:51	10/20/22 15:50	1
2-Chloronaphthalene	ND		0.19	0.059	ug/L		10/17/22 11:51	10/20/22 15:50	1
2-Chlorophenol	ND		1.0	0.13	ug/L		10/17/22 11:51	10/20/22 15:50	1
Chrysene	ND		0.19	0.081	ug/L		10/17/22 11:51	10/20/22 15:50	1
Dibenzo(a,h)-anthracene	ND		0.19	0.072	ug/L		10/17/22 11:51	10/20/22 15:50	1
Di-n-butyl phthalate	ND		1.0	0.74	ug/L		10/17/22 11:51	10/20/22 15:50	1
3,3'-Dichlorobenzidine	ND		1.0	0.58	ug/L		10/17/22 11:51	10/20/22 15:50	1
2,4-Dichlorophenol	ND		0.19	0.051	ug/L		10/17/22 11:51	10/20/22 15:50	1
Diethyl phthalate	ND		1.0	0.57	ug/L		10/17/22 11:51	10/20/22 15:50	1
2,4-Dimethylphenol	ND		1.0	0.17	ug/L		10/17/22 11:51	10/20/22 15:50	1
Dimethyl phthalate	ND		1.0	0.20	ug/L		10/17/22 11:51	10/20/22 15:50	1
4,6-Dinitro-2-methylphenol	ND		5.0	1.5	ug/L		10/17/22 11:51	10/20/22 15:50	1
2,4-Dinitrophenol	ND		10	1.5	ug/L		10/17/22 11:51	10/20/22 15:50	1
2,4-Dinitrotoluene	ND		1.0	0.35	ug/L		10/17/22 11:51	10/20/22 15:50	1
2,6-Dinitrotoluene	ND		1.0	0.17	ug/L		10/17/22 11:51	10/20/22 15:50	1
Di-n-octyl phthalate	ND		1.0	0.69	ug/L		10/17/22 11:51	10/20/22 15:50	1
Fluoranthene	ND		0.19	0.060	ug/L		10/17/22 11:51	10/20/22 15:50	1
Fluorene	ND		0.19	0.069	ug/L		10/17/22 11:51	10/20/22 15:50	1
Hexachlorobenzene	ND		0.19	0.056	ug/L		10/17/22 11:51	10/20/22 15:50	1
Hexachlorobutadiene	ND		0.19	0.069	ug/L		10/17/22 11:51	10/20/22 15:50	1
Hexachlorocyclopentadiene	ND		1.0	0.50	ug/L		10/17/22 11:51	10/20/22 15:50	1
Hexachloroethane	ND		1.0	0.13	ug/L		10/17/22 11:51	10/20/22 15:50	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.085	ug/L		10/17/22 11:51	10/20/22 15:50	1
Isophorone	ND		1.0	0.19	ug/L		10/17/22 11:51	10/20/22 15:50	1
Naphthalene	ND		0.19	0.059	ug/L		10/17/22 11:51	10/20/22 15:50	1
Nitrobenzene	ND		2.0	0.50	ug/L		10/17/22 11:51	10/20/22 15:50	1
2-Nitrophenol	ND		1.0	0.19	ug/L		10/17/22 11:51	10/20/22 15:50	1
4-Nitrophenol	ND		5.0	0.94	ug/L		10/17/22 11:51	10/20/22 15:50	1
N-Nitrosodimethylamine	ND		1.0	0.067	ug/L		10/17/22 11:51	10/20/22 15:50	1
N-Nitrosodiphenylamine	ND		1.0	0.12	ug/L		10/17/22 11:51	10/20/22 15:50	1
N-Nitrosodi-n-propylamine	ND		0.19	0.071	ug/L		10/17/22 11:51	10/20/22 15:50	1
2,2'-oxybis[1-chloropropane]	ND		0.19	0.058	ug/L		10/17/22 11:51	10/20/22 15:50	1
Pentachlorophenol	ND		5.0	0.85	ug/L		10/17/22 11:51	10/20/22 15:50	1
Phenanthrene	ND		0.19	0.055	ug/L		10/17/22 11:51	10/20/22 15:50	1
Phenol	ND		1.0	0.49	ug/L		10/17/22 11:51	10/20/22 15:50	1
Pyrene	ND		0.19	0.054			10/17/22 11:51	10/20/22 15:50	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L		10/17/22 11:51	10/20/22 15:50	1
2,4,6-Trichlorophenol	ND		1.0	0.22	ug/L		10/17/22 11:51	10/20/22 15:50	1
Bis(2-chloroethoxy)methane	ND		1.0	0.15			10/17/22 11:51	10/20/22 15:50	1
4-Chlorophenyl phenyl ether	ND		1.0	0.22			10/17/22 11:51	10/20/22 15:50	1
1,2-Diphenylhydrazine(as	ND		1.0	0.20	-		10/17/22 11:51	10/20/22 15:50	1
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Client: ARCADIS U.S., Inc. Job ID: 180-146141-1

Project/Site: Cytec Havre de Grace MD

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-415298/1-A

Matrix: Water

Analysis Batch: 415666

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 415298

	MB	MB				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	86		47 - 107	10/17/22 11:51	10/20/22 15:50	1
2-Fluorophenol	99		35 - 109	10/17/22 11:51	10/20/22 15:50	1
2,4,6-Tribromophenol	93		32 - 127	10/17/22 11:51	10/20/22 15:50	1
Nitrobenzene-d5	86		47 - 110	10/17/22 11:51	10/20/22 15:50	1
Phenol-d5	95		37 - 110	10/17/22 11:51	10/20/22 15:50	1
Terphenyl-d14	99		32 - 115	10/17/22 11:51	10/20/22 15:50	1
Nitrobenzene-d5 Phenol-d5	86 95		47 - 110 37 - 110	10/17/22 11:51 10/17/22 11:51	10/20/22 15:50 10/20/22 15:50	1 1 1 1

Lab Sample ID: LCS 180-415298/2-A

Matrix: Water

Analysis Batch: 415666

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 415298

Analysis Balcii: 410000	Spike Added	LCS	LCS Qualifier	Unit	D	9/ Boo	%Rec Limits
Analyte		6.98	Qualifier	Unit		%Rec 70	33 - 145
Acenaphthana	10.0	7.03		ug/L		70 70	33 - 145 47 - 145
Acenaphthene Anthracene	10.0	6.86		ug/L ug/L		70 69	47 - 145 27 - 133
Benzidine	10.0	ND		ug/L ug/L		51	5 - 100
	10.0	6.76		_		68	33 - 143
Benzo[a]anthracene	10.0	5.39		ug/L		54	33 - 143 24 - 150
Benzo[b]fluoranthene	10.0	6.94		ug/L			11 - 150
Benzo[k]fluoranthene	10.0	7.60		ug/L		69 76	
Benzo[g,h,i]perylene	10.0	6.06		ug/L		76 61	10 ₋ 150 17 ₋ 150
Benzo[a]pyrene				ug/L			12 - 150
Bis(2-chloroethyl)ether	10.0 10.0	7.00 ND		ug/L ug/L		70 58	10 - 150
Bis(2-ethylhexyl) phthalate		6.78		-		56 68	53 - 127
4-Bromophenyl phenyl ether	10.0	5.92		ug/L		59	10 - 150
Butyl benzyl phthalate	10.0	7.50		ug/L		59 75	22 - 147
4-Chloro-3-methylphenol 2-Chloronaphthalene	10.0	6.41		ug/L ug/L		75 64	22 - 147 60 - 120
							23 - 134
2-Chlorophenol	10.0 10.0	7.45		ug/L		75 60	
Chrysene	10.0	6.90 7.24		ug/L		69 72	17 - 150 10 - 150
Dibenzo(a,h)-anthracene				ug/L			
Di-n-butyl phthalate	10.0	7.07		ug/L		71 74	10 - 120
3,3'-Dichlorobenzidine	10.0	7.12		ug/L		71 74	10 - 150
2,4-Dichlorophenol	10.0	7.07		ug/L		71	39 - 135
Diethyl phthalate	10.0	6.99		ug/L		70	10 - 120
2,4-Dimethylphenol	10.0	6.72		ug/L		67	32 - 120
Dimethyl phthalate	10.0	6.67		ug/L		67	10 - 120
4,6-Dinitro-2-methylphenol	20.0	11.6		ug/L		58	10 - 150
2,4-Dinitrophenol	20.0	11.5		ug/L		57	10 - 150
2,4-Dinitrotoluene	10.0	7.83		ug/L		78	39 - 139
2,6-Dinitrotoluene	10.0	7.43		ug/L		74	50 - 150
Di-n-octyl phthalate	10.0	4.63		ug/L		46	10 - 146
Fluoranthene	10.0	7.78		ug/L		78	26 - 137
Fluorene	10.0	7.21		ug/L		72	59 - 121
Hexachlorobenzene	10.0	7.36		ug/L		74	10 - 150
Hexachlorobutadiene	10.0	6.64		ug/L		66	24 - 120
Hexachlorocyclopentadiene	10.0	5.51		ug/L		55	37 - 121
Hexachloroethane	10.0	6.90		ug/L		69	40 - 120
Indeno[1,2,3-cd]pyrene	10.0	7.37		ug/L		74	10 - 150

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Client: ARCADIS U.S., Inc. Job ID: 180-146141-1

Spike

LCS LCS

Project/Site: Cytec Havre de Grace MD

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-415298/2-A

Matrix: Water

Analysis Batch: 415666

Client Sample ID: Lab Control Sample

Prep	o Type: Total/NA
Pre	p Batch: 415298
%Re	С

					,	
Analyte	Added	Result	Qualifier Unit	D %Rec	Limits	
Isophorone	10.0	6.64	ug/L	66	21 - 150	
Naphthalene	10.0	7.28	ug/L	73	21 - 133	
Nitrobenzene	10.0	6.40	ug/L	64	35 - 150	
2-Nitrophenol	10.0	7.26	ug/L	73	29 - 150	
4-Nitrophenol	20.0	10.6	ug/L	53	10 - 132	
N-Nitrosodimethylamine	10.0	7.09	ug/L	71	33 - 130	
N-Nitrosodiphenylamine	10.0	6.58	ug/L	66	51 - 100	
N-Nitrosodi-n-propylamine	10.0	7.94	ug/L	79	10 - 150	
2,2'-oxybis[1-chloropropane]	10.0	9.87	ug/L	99	36 - 150	
Pentachlorophenol	20.0	15.2	ug/L	76	14 - 150	
Phenanthrene	10.0	6.70	ug/L	67	54 - 120	
Phenol	10.0	7.14	ug/L	71	10 - 120	
Pyrene	10.0	6.11	ug/L	61	52 - 120	
1,2,4-Trichlorobenzene	10.0	6.55	ug/L	65	44 - 142	
2,4,6-Trichlorophenol	10.0	6.35	ug/L	63	37 - 144	
Bis(2-chloroethoxy)methane	10.0	5.96	ug/L	60	33 - 150	
4-Chlorophenyl phenyl ether	10.0	6.91	ug/L	69	25 - 150	
1,2-Diphenylhydrazine(as	10.0	4.78	ug/L	48	43 - 105	
Azobenzene)						

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl	85		47 - 107
2-Fluorophenol	95		35 - 109
2,4,6-Tribromophenol	108		32 - 127
Nitrobenzene-d5	87		47 - 110
Phenol-d5	93		37 - 110
Terphenyl-d14	88		32 - 115

Lab Sample ID: 180-146141-1 MS

Matrix: Water

Analysis Batch: 415666

Client Sample ID: POTWOUTFALL ((101222)
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Prep Type: Total/NA

Prep Batch: 415298

Alialysis Balcii. 413000	Sample	Sample	Spike	MS	MS				%Rec
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Acenaphthylene	ND		10.0	6.14		ug/L		61	35 - 145
Acenaphthene	ND		10.0	6.30		ug/L		63	47 - 145
Anthracene	ND		10.0	5.92		ug/L		59	27 - 133
Benzidine	ND	F1	10.0	ND	F1	ug/L		0	5 - 100
Benzo[a]anthracene	ND		10.0	6.21		ug/L		62	33 - 143
Benzo[b]fluoranthene	ND		10.0	5.07		ug/L		51	24 - 159
Benzo[k]fluoranthene	ND		10.0	5.97		ug/L		60	11 - 162
Benzo[g,h,i]perylene	ND		10.0	7.13		ug/L		71	10 - 170
Benzo[a]pyrene	ND		10.0	5.18		ug/L		52	17 - 163
Bis(2-chloroethyl)ether	ND		10.0	6.31		ug/L		63	12 - 158
Bis(2-ethylhexyl) phthalate	ND		10.0	6.39	J	ug/L		64	10 - 158
4-Bromophenyl phenyl ether	ND		10.0	6.27		ug/L		63	53 - 127
Butyl benzyl phthalate	ND		10.0	5.81		ug/L		58	10 - 152
4-Chloro-3-methylphenol	ND		10.0	5.66		ug/L		57	22 - 147
2-Chloronaphthalene	ND	F1	10.0	5.69	F1	ug/L		57	60 - 120
2-Chlorophenol	ND		10.0	5.45		ug/L		54	23 - 134

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11/3/2022

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Spike

Added

Client: ARCADIS U.S., Inc.

Job ID: 180-146141-1

MS MS

Result Qualifier Unit

Project/Site: Cytec Havre de Grace MD

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Sample Sample

Result Qualifier

Lab Sample ID: 180-146141-1 MS

Matrix: Water

Analyte

Analysis Batch: 415666

Bis(2-chloroethoxy)methane

4-Chlorophenyl phenyl ether

1,2-Diphenylhydrazine(as

Azobenzene)

Client Sample ID: POTWOUTFALL (101222)

D %Rec

%Rec

Limits

Prep Type: Total/NA Prep Batch: 415298

, ,		,			_ /0		
Chrysene	ND	10.0	6.23	ug/L	62	17 - 168	
Dibenzo(a,h)-anthracene	ND	10.0	6.78	ug/L	68	10 - 170	
Di-n-butyl phthalate	ND	10.0	6.77	ug/L	68	10 - 120	
3,3'-Dichlorobenzidine	ND	10.0	4.54	ug/L	45	10 - 170	
2,4-Dichlorophenol	ND	10.0	5.01	ug/L	50	39 - 135	
Diethyl phthalate	ND	10.0	5.01	ug/L	50	10 - 120	
2,4-Dimethylphenol	ND	10.0	4.78	ug/L	48	32 - 120	
Dimethyl phthalate	ND	10.0	4.65	ug/L	47	10 - 120	
4,6-Dinitro-2-methylphenol	ND	20.0	11.0	ug/L	55	10 - 170	
2,4-Dinitrophenol	ND	20.0	11.8	ug/L	59	10 - 170	
2,4-Dinitrotoluene	ND	10.0	7.06	ug/L	71	39 - 139	
2,6-Dinitrotoluene	ND	10.0	6.74	ug/L	67	50 - 158	
Di-n-octyl phthalate	ND	10.0	4.91	ug/L	49	10 - 146	
Fluoranthene	ND	10.0	7.11	ug/L	71	26 - 137	
Fluorene	ND	10.0	6.51	ug/L	65	59 - 121	
Hexachlorobenzene	ND	10.0	6.87	ug/L	69	10 - 152	
Hexachlorobutadiene	ND	10.0	5.68	ug/L	57	24 - 120	
Hexachlorocyclopentadiene	ND	10.0	4.73	ug/L	47	41 - 106	
Hexachloroethane	ND	10.0	5.97	ug/L	60	40 - 120	
Indeno[1,2,3-cd]pyrene	ND	10.0	6.78	ug/L	68	10 - 170	
Isophorone	ND	10.0	6.23	ug/L	62	21 - 170	
Naphthalene	ND	10.0	6.31	ug/L	63	21 - 133	
Nitrobenzene	ND	10.0	5.79	ug/L	58	35 - 170	
2-Nitrophenol	ND	10.0	5.42	ug/L	54	29 - 170	
4-Nitrophenol	ND	20.0	8.02	ug/L	40	10 - 132	
N-Nitrosodimethylamine	ND	10.0	6.40	ug/L	64	48 - 109	
N-Nitrosodiphenylamine	ND F1	10.0	4.49 F1	ug/L	45	56 - 100	
N-Nitrosodi-n-propylamine	ND	10.0	7.21	ug/L	72	10 - 170	
2,2'-oxybis[1-chloropropane]	ND	10.0	9.09	ug/L	91	36 - 166	
Pentachlorophenol	ND	20.0	10.7	ug/L	54	17 - 170	
Phenanthrene	ND	10.0	6.29	ug/L	63	54 - 120	
Phenol	ND	10.0	5.48	ug/L	55	10 - 120	
Pyrene	ND	10.0	5.56	ug/L	56	52 - 120	
1,2,4-Trichlorobenzene	ND	10.0	5.62	ug/L	56	44 - 142	
2,4,6-Trichlorophenol	ND	10.0	4.27	ug/L	43	37 - 144	

10.0

10.0

10.0

5.58

6.19

4.37 F1

ug/L

ug/L

ug/L

56

62

33 - 170

25 - 158

46 - 103

1S	MS

ND

ND

ND F1

Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl	80		47 - 107
2-Fluorophenol	83		35 - 109
2,4,6-Tribromophenol	91		32 - 127
Nitrobenzene-d5	86		47 - 110
Phenol-d5	83		37 - 110
Terphenyl-d14	87		32 - 115

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11/3/2022

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MR MR

Project/Site: Cytec Havre de Grace MD

Method: EPA 200.7 Rev 4 - Metals (ICP)

Lab Sample ID: MB 180-416128/1-A

Matrix: Water

Analysis Batch: 416359

Client Sample ID: Method Blank **Prep Type: Total Recoverable**

Prep Batch: 416128

Job ID: 180-146141-1

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10	5.7	ug/L		10/25/22 11:45	10/27/22 00:11	1
Cadmium	ND		5.0	0.33	ug/L		10/25/22 11:45	10/27/22 00:11	1
Chromium	ND		5.0	2.6	ug/L		10/25/22 11:45	10/27/22 00:11	1
Copper	ND		25	3.9	ug/L		10/25/22 11:45	10/27/22 00:11	1
Lead	ND		10	2.3	ug/L		10/25/22 11:45	10/27/22 00:11	1
Nickel	ND		40	2.1	ug/L		10/25/22 11:45	10/27/22 00:11	1
Silver	ND		5.0	0.87	ug/L		10/25/22 11:45	10/27/22 00:11	1
Zinc	ND		20	3.3	ug/L		10/25/22 11:45	10/27/22 00:11	1

Lab Sample ID: LCS 180-416128/2-A

Matrix: Water

Analysis Batch: 416359

Client Sample ID: Lab Control Sample Prep Type: Total Recoverable

Client Sample ID: Method Blank

Prep Type: Total/NA **Prep Batch: 416511**

Prep Type: Total/NA

Prep Batch: 416128

LCS LCS %Rec Spike Analyte Added Result Qualifier D %Rec Limits Unit Arsenic 1000 1140 85 - 115 ug/L 114 500 Cadmium 577 ug/L 115 85 _ 115 Chromium 500 544 ug/L 109 85 - 115 500 539 108 85 - 115 Copper ug/L Lead 500 535 107 85 - 115 ug/L ug/L Nickel 500 559 112 85 _ 115 Silver 250 277 ug/L 111 85 - 115 Zinc 250 277 ug/L 111 85 - 115

Method: EPA 245.1 Rev. - Mercury (CVAA)

Lab Sample ID: MB 180-416511/1-A

Matrix: Water

Analysis Batch: 416617

MB MB

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Mercury $\overline{\mathsf{ND}}$ 0.20 0.13 ug/L 10/28/22 06:47 10/28/22 13:55

Lab Sample ID: LCS 180-416511/2-A

Matrix: Water

Analyte

Mercury

Analysis Batch: 416617

Spike Added 2.50

LCS LCS Result Qualifier 2.74

Unit ug/L

Prep Batch: 416511 %Rec %Rec Limits 110 85 - 115

Client Sample ID: Lab Control Sample

Method: SM 4500CN E - Total Cyanide

Lab Sample ID: MB 180-416138/4-A

Matrix: Water

Analysis Batch: 416228

MB MB

Analyte Cyanide, Total

Result Qualifier ND

MDL Unit 0.0080 mg/L

Prepared 10/25/22 13:45 10/25/22 16:31

Prep Batch: 416138

Analyzed Dil Fac

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RL

0.010

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Client Sample ID: Method Blank Prep Type: Total/NA

Client: ARCADIS U.S., Inc.

Job ID: 180-146141-1

Project/Site: Cytec Havre de Grace MD

Method: SM 4500CN E - Total Cy	yanide (Continued)
--------------------------------	--------------------

Analyte

Cyanide, Total

Lab Sample ID: HLCS 180-416138/2-A Matrix: Water Analysis Batch: 416228				Clie	nt Sar	nple ID	: Lab Control Sample Prep Type: Total/NA Prep Batch: 416138
	Spike		HLCS		_		%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Cyanide, Total	0.250	0.252		mg/L		101	90 - 110
Lab Sample ID: LCS 180-416138/3-A Matrix: Water Analysis Batch: 416228				Clie	nt Sar	nple ID	: Lab Control Sample Prep Type: Total/NA Prep Batch: 416138
	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Cyanide, Total	0.200	0.215		mg/L		107	90 - 110
Lab Sample ID: LLCS 180-416138/1-A				Clie	nt Sar	nple ID	: Lab Control Sample
Matrix: Water							Prep Type: Total/NA
Analysis Batch: 416228							Prep Batch: 416138
	Spike	LLCS	LLCS				%Rec

Result Qualifier Unit

mg/L

0.0515

Added

0.0500

Limits

90 - 110

QC Association Summary

Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

GC/MS VOA

Analysis Batch: 415073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-146141-1	POTWOUTFALL (101222)	Total/NA	Water	EPA 624.1	
MB 180-415073/7	Method Blank	Total/NA	Water	EPA 624.1	
LCS 180-415073/5	Lab Control Sample	Total/NA	Water	EPA 624.1	

GC/MS Semi VOA

Prep Batch: 415298

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-146141-1	POTWOUTFALL (101222)	Total/NA	Water	625	
MB 180-415298/1-A	Method Blank	Total/NA	Water	625	
LCS 180-415298/2-A	Lab Control Sample	Total/NA	Water	625	
180-146141-1 MS	POTWOUTFALL (101222)	Total/NA	Water	625	

Analysis Batch: 415666

Lab Sample ID 180-146141-1	Client Sample ID POTWOUTFALL (101222)	Prep Type Total/NA	Matrix Water	Method EPA 625.1	Prep Batch 415298
MB 180-415298/1-A	Method Blank	Total/NA	Water	EPA 625.1	415298
LCS 180-415298/2-A	Lab Control Sample	Total/NA	Water	EPA 625.1	415298
180-146141-1 MS	POTWOUTFALL (101222)	Total/NA	Water	EPA 625.1	415298

Metals

Prep Batch: 416128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-146141-1	POTWOUTFALL (101222)	Total Recoverable	Water	200.7	
MB 180-416128/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 180-416128/2-A	Lab Control Sample	Total Recoverable	Water	200.7	

Analysis Batch: 416359

Lab Sample ID 180-146141-1	Client Sample ID POTWOUTFALL (101222)	Prep Type Total Recoverable	Matrix Water	Method EPA 200.7 Rev 4	Prep Batch 416128
MB 180-416128/1-A	Method Blank	Total Recoverable	Water	EPA 200.7 Rev 4	416128
LCS 180-416128/2-A	Lab Control Sample	Total Recoverable	Water	EPA 200.7 Rev 4	416128

Prep Batch: 416511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-146141-1	POTWOUTFALL (101222)	Total/NA	Water	245.1	
MB 180-416511/1-A	Method Blank	Total/NA	Water	245.1	
LCS 180-416511/2-A	Lab Control Sample	Total/NA	Water	245.1	

Analysis Batch: 416617

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-146141-1	POTWOUTFALL (101222)	Total/NA	Water	EPA 245.1 Rev.	416511
MB 180-416511/1-A	Method Blank	Total/NA	Water	EPA 245.1 Rev.	416511
LCS 180-416511/2-A	Lab Control Sample	Total/NA	Water	EPA 245.1 Rev.	416511

General Chemistry

Prep Batch: 416138

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-146141-1	POTWOUTFALL (101222)	Total/NA	Water	SM 4500 CN C	
MB 180-416138/4-A	Method Blank	Total/NA	Water	SM 4500 CN C	

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Job ID: 180-146141-1

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QC Association Summary

Client: ARCADIS U.S., Inc. Job ID: 180-146141-1

Project/Site: Cytec Havre de Grace MD

General Chemistry (Continued)

Prep Batch: 416138 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
HLCS 180-416138/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LCS 180-416138/3-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LLCS 180-416138/1-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	

Analysis Batch: 416228

Lab Sample ID 180-146141-1	Client Sample ID POTWOUTFALL (101222)	Prep Type Total/NA	Matrix Water	Method SM 4500CN E	Prep Batch 416138
MB 180-416138/4-A	Method Blank	Total/NA	Water	SM 4500CN E	416138
HLCS 180-416138/2-A	Lab Control Sample	Total/NA	Water	SM 4500CN E	416138
LCS 180-416138/3-A	Lab Control Sample	Total/NA	Water	SM 4500CN E	416138
LLCS 180-416138/1-A	Lab Control Sample	Total/NA	Water	SM 4500CN E	416138

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None
Ashao2
Na204S
Na203
Na2503
Na25203
H2504
H2504
NACA4
V pH 4-5
Trizma
c other (specify) Ver 06 08 2021 180-146141 Chain of Custody Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Mont
Special Instructions/QC Requirements COC No: 180-85399-15095 · reservation Cod Amchlor Ascorbic Acid Zn Acetate Nitric Acid NaHSO4 Page: Page 1 of 1 Ice DI Water EDTA EDA Enemistrop to redmuN latoT 100 Method of Shipment: amier Tracking No(s): State of Origin: Analysis Requested Cooler Temperature(s) °C and Other Remarks: Lab PM: Colussy Jill L E-Mail: Jill Colussy@et.eurofinsus.com 5PA 200. 7 Rev4 (245.1 Rev4 Time: (W=water S=solid, O=waste/oi BT=Tissue, A=Air) Matrix Preservation Code: Company 3 Radiological (C=comp, G=grab) Keh Sample Type (780 -9029 Compliance Project: A Yes A No 8 Sample Time 1030 Date/Time: 0/ [2-[33-956-64h ţ Date: O. Kromer Unknown FAT Requested (days): Due Date Requested: PO #; 30005455.0002. Sample Date 10112122 WO#: 30114618 Project #: 18017987 7 Date/Time: Poison B Skin Irritant Deliverable Requested: I III IV Other (specify) 0TWOUTFOILLIDI222 Custody Seal No. Phone: 412-963-7058 Fax; 412-963-2468 Fronce Flammable shwetha.sridharan@arcadis.com Possible Hazard Identification 7550 Teague Road Suite 210 Project Name: Cytec Havre de Grace MD Empty Kit Relinquished by Custody Seals Intact: △ Yes △ No Paird rip Blank Client Information Ms. Shwetha Sridharan Sample Identification ARCADIS U.S Inc. Phone: |302-897-8993(Tel) Non-Hazard linquished by: nquished by Pennsylvania inquished by: State, Zip: MD, 21076 Hanover

Ter

💸 eurofins

Chain of Custody Record

Ballimore

Eurofins Pittsburgh 301 Alpha Drive RIDC Park

Pittsburgh PA 15238

Job Number: 180-146141-1

Login Number: 146141 List Source: Eurofins Pittsburgh

List Number: 1

Creator: Kovitch, Christina M

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



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ANALYTICAL REPORT

Eurofins Pittsburgh 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 Tel: (412)963-7058

Laboratory Job ID: 180-146143-1

Client Project/Site: Cytec Havre de Grace MD

For:

ARCADIS U.S., Inc. 7550 Teague Road Suite 210 Hanover, Maryland 21076

Attn: Ms. Shwetha Sridharan



Authorized for release by: 11/11/2022 9:34:48 AM

Jill Colussy, Project Manager I (412)963-2444

Jill.Colussy@et.eurofinsus.com

.....LINKS

Review your project results through

Have a Question?



Visit us at: www.eurofinsus.com/Env This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

PA Lab ID: 02-00416

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the $\{0\}$ Project Manager.

Client: ARCADIS U.S., Inc. Project/Site: Cytec Havre de Grace MD Laboratory Job ID: 180-146143-1

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Case Narrative

Client: ARCADIS U.S., Inc.

Job ID: 180-146143-1 Project/Site: Cytec Havre de Grace MD

Job ID: 180-146143-1

Laboratory: Eurofins Pittsburgh

Narrative

Job Narrative 180-146143-1

Receipt

The samples were received on 10/13/2022 10:40 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.2° C.

GC/MS VOA

Due to the concentration of target compounds detected, sample EW-1 (101122) (180-146143-1) and EFFLUENT (101122) (180-146143-3) were analyzed at a dilution. Elevated reporting limits (RLs) are provided.

Sample MW-10D (101122) (180-146143-2) was re-analyzed outside of the holding time to confirm the results for 1,1-Dichloroethane. Both sets of data are reported.

The laboratory control sample (LCS) for analytical batch 180-415073 recovered above the control limits for 1,1,2,2-Tetrachloroethane, 1,1-Dichloroethane, 1,1-Dichloroethene and Carbon disulfide. These analytes were biased high in the LCS and were not detected in the associated samples except sampleMW-10D (101122) (180-146143-2).

Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 180-146143-1

Project/Site: Cytec Havre de Grace MD

Qualifiers

GC/MS VOA

 Qualifier
 Qualifier Description

 *+
 LCS and/or LCSD is outside acceptance limits, high biased.

 H
 Sample was prepped or analyzed beyond the specified holding time

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Appreviation	These commonly used appreviations may or may not be present in this report.
n	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery

CFL Contains Free Liquid
CFU Colony Forming Unit
CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
MPN Most Probable Number
MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive
QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

Eurofins Pittsburgh

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 180-146143-1

Project/Site: Cytec Havre de Grace MD

Laboratory: Eurofins Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-22 *
California	State	2891	04-30-23
Connecticut	State	PH-0688	09-30-22 *
Florida	NELAP	E871008	10-23-22
Georgia	State	PA 02-00416	10-23-22
Illinois	NELAP	004375	10-23-22
Kansas	NELAP	E-10350	10-23-22
Kentucky (UST)	State	162013	04-30-23
Kentucky (WW)	State	KY98043	12-31-22
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	10-23-22
Maine	State	PA00164	03-06-24
Minnesota	NELAP	042-999-482	10-23-22
New Hampshire	NELAP	2030	10-23-22
New Jersey	NELAP	PA005	10-23-22
New York	NELAP	11182	10-23-22
North Carolina (WW/SW)	State	434	12-31-22
North Dakota	State	R-227	10-23-22
Oregon	NELAP	PA-2151	10-23-22
Pennsylvania	NELAP	02-00416	10-23-22
Rhode Island	State	LAO00362	12-31-22
South Carolina	State	89014	04-20-23
Texas	NELAP	T104704528	10-23-22
JSDA	US Federal Programs	P330-16-00211	06-21-24
Utah	NELAP	PA001462019-8	10-23-22
√irginia	NELAP	10043	10-23-22
West Virginia DEP	State	142	10-23-22
Wisconsin	State	998027800	08-31-23

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 $^{^{\}star}\,\text{Accreditation/Certification renewal pending - accreditation/certification considered valid}.$

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Sample Summary

Client: ARCADIS U.S., Inc. Job ID: 180-146143-1

Client: ARCADIS U.S., Inc. Project/Site: Cytec Havre de Grace MD

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-146143-1	EW-1 (101122)	Water	10/11/22 13:00	10/13/22 10:40
180-146143-2	MW-10D (101122)	Water	10/11/22 13:10	10/13/22 10:40
180-146143-3	EFFLUENT (101122)	Water	10/11/22 13:20	10/13/22 10:40
180-146143-4	TRIP BLANK	Water	10/11/22 00:00	10/13/22 10:40

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Method Summary

Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

 Method
 Method Description
 Protocol
 Laboratory

 EPA 624.1
 Volatile Organic Compounds (GC/MS)
 40CFR136A
 EET PIT

4

Job ID: 180-146143-1

Protocol References:

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

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Lab Chronicle

Client: ARCADIS U.S., Inc. Job ID: 180-146143-1

Project/Site: Cytec Havre de Grace MD

Lab Sample ID: 180-146143-1 **Client Sample ID: EW-1 (101122)**

Date Collected: 10/11/22 13:00 **Matrix: Water**

Date Received: 10/13/22 10:40

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 624.1		10	5 mL	5 mL	415073	10/14/22 19:43	J1T	EET PIT
	Instrumer	nt ID: CHHP6								

Client Sample ID: MW-10D (101122) Lab Sample ID: 180-146143-2

Date Collected: 10/11/22 13:10

Matrix: Water Date Received: 10/13/22 10:40

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumer	EPA 624.1 nt ID: CHHP6		1	5 mL	5 mL	415073	10/14/22 19:17	J1T	EET PIT
Total/NA	Analysis Instrumer	EPA 624.1 at ID: CHHP6	RA	1	5 mL	5 mL	415270	10/17/22 21:13	J1T	EET PIT

Client Sample ID: EFFLUENT (101122) Lab Sample ID: 180-146143-3 **Matrix: Water**

Date Collected: 10/11/22 13:20 Date Received: 10/13/22 10:40

Dil Initial Batch Batch Final Batch Prepared **Prep Type** Method **Amount Amount** Number or Analyzed Type Run **Factor** Analyst Total/NA Analysis EPA 624.1 5 mL 5 mL 415073 10/14/22 17:58 J1T EET PIT Instrument ID: CHHP6

Client Sample ID: TRIP BLANK Lab Sample ID: 180-146143-4

Date Collected: 10/11/22 00:00 **Matrix: Water**

Date Received: 10/13/22 10:40

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 624.1		1	5 mL	5 mL	415073	10/14/22 13:59	J1T	EET PIT
	Instrumer	nt ID: CHHP6								

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: EET PIT

Batch Type: Analysis J1T = Jianwu Tang

Eurofins Pittsburgh

11/11/2022

Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Client Sample ID: EW-1 (101122)

Date Collected: 10/11/22 13:00 Date Received: 10/13/22 10:40 Lab Sample ID: 180-146143-1

Matrix: Water

Method: 40CFR136A EPA 6 Analyte		Organic C Qualifier	ompounds RL	(GC/MS) MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		10	6.0	ug/L			10/14/22 19:43	10
1,1,2,2-Tetrachloroethane	ND	*+	10	6.0	ug/L			10/14/22 19:43	10
1,1,2-Trichloroethane	ND		10	4.5	ug/L			10/14/22 19:43	10
1,1-Dichloroethane	ND	*+	10	3.1	ug/L			10/14/22 19:43	10
1,1-Dichloroethene	ND	*+	10	5.5	ug/L			10/14/22 19:43	10
1,2-Dichloroethane	400		10	5.7	ug/L			10/14/22 19:43	10
1,2-Dichloropropane	ND		10	6.6	ug/L			10/14/22 19:43	10
1,2-Dichlorobenzene	ND		10	3.6	ug/L			10/14/22 19:43	10
1,3-Dichlorobenzene	ND		10	5.0	ug/L			10/14/22 19:43	10
1,4-Dichlorobenzene	ND		10	5.4	ug/L			10/14/22 19:43	10
2-Chloroethyl vinyl ether	ND		20	17	ug/L			10/14/22 19:43	10
Acrolein	ND		200	160	ug/L			10/14/22 19:43	10
Acrylonitrile	ND		200	78	ug/L			10/14/22 19:43	10
Benzene	ND		10	6.0	ug/L			10/14/22 19:43	10
Bromoform	ND		10	9.8	ug/L			10/14/22 19:43	10
Bromomethane	ND		10	8.9	ug/L			10/14/22 19:43	10
Carbon disulfide	ND	*+	10	8.8	ug/L			10/14/22 19:43	10
Carbon tetrachloride	ND		10	8.8	ug/L			10/14/22 19:43	10
Chlorobenzene	ND		10	5.0	ug/L			10/14/22 19:43	10
Chloroform	ND		10	6.0	ug/L			10/14/22 19:43	10
Chloromethane	ND		10	9.0	ug/L			10/14/22 19:43	10
cis-1,2-Dichloroethene	ND		10	7.1	ug/L			10/14/22 19:43	10
cis-1,3-Dichloropropene	ND		10	5.9	ug/L			10/14/22 19:43	10
Ethylbenzene	ND		10	5.1	ug/L			10/14/22 19:43	10
Methylene Chloride	ND		10	8.9	ug/L			10/14/22 19:43	10
Tetrachloroethene	ND		10	4.7	ug/L			10/14/22 19:43	10
Toluene	ND		10	4.6	ug/L			10/14/22 19:43	10
trans-1,2-Dichloroethene	ND		10	6.7	ug/L			10/14/22 19:43	10
trans-1,3-Dichloropropene	ND		10	5.8	ug/L			10/14/22 19:43	10
Trichloroethene	8.7	J	10	6.9	ug/L			10/14/22 19:43	10
Vinyl chloride	ND		10	4.0	ug/L			10/14/22 19:43	10
Dibromochloromethane	ND		10	8.4	ug/L			10/14/22 19:43	10
Bromodichloromethane	ND		10	6.4	ug/L			10/14/22 19:43	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		28 - 163			_	<u> </u>	10/14/22 19:43	10
4-Bromofluorobenzene (Surr)	100		41 - 122					10/14/22 19:43	10
Toluene-d8 (Surr)	103		53 - 125					10/14/22 19:43	10
Dibromofluoromethane (Surr)	113		59 - 168					10/14/22 19:43	10

Client Sample ID: MW-10D (101122)

Date Collected: 10/11/22 13:10

Date Received: 10/13/22 10:40

Lab Sample ID: 180-146143-2

Matrix: Water

Method: 40CFR136A EPA 624.1 - Volatile Organic Compounds (GC/MS)									
Analyte	Result (Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			10/14/22 19:17	1
1,1,2,2-Tetrachloroethane	ND *	*+	1.0	0.60	ug/L			10/14/22 19:17	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			10/14/22 19:17	1
1,1-Dichloroethane	2.9 *	*+	1.0	0.31	ug/L			10/14/22 19:17	1

Eurofins Pittsburgh

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 180-146143-1

Project/Site: Cytec Havre de Grace MD

Client Sample ID: MW-10D (101122)

Date Collected: 10/11/22 13:10 Date Received: 10/13/22 10:40

Lab Sample ID: 180-146143-2

Matrix: Water

Method: 40CFR136A EPA 6		_	-		•	ued)			
Analyte	Result Q		RL	MDL		D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND *-	+	1.0	0.55	ug/L			10/14/22 19:17	1
1,2-Dichloroethane	1.8		1.0		ug/L			10/14/22 19:17	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			10/14/22 19:17	1
1,2-Dichlorobenzene	ND		1.0	0.36	ug/L			10/14/22 19:17	1
1,3-Dichlorobenzene	ND		1.0	0.50	ug/L			10/14/22 19:17	1
1,4-Dichlorobenzene	ND		1.0	0.54	ug/L			10/14/22 19:17	1
2-Chloroethyl vinyl ether	ND		2.0	1.7	ug/L			10/14/22 19:17	1
Acrolein	ND		20	16	ug/L			10/14/22 19:17	1
Acrylonitrile	ND		20	7.8	ug/L			10/14/22 19:17	1
Benzene	ND		1.0	0.60	ug/L			10/14/22 19:17	1
Bromoform	ND		1.0	0.98	ug/L			10/14/22 19:17	1
Bromomethane	ND		1.0	0.89	ug/L			10/14/22 19:17	1
Carbon disulfide	ND *+	+	1.0	0.88	ug/L			10/14/22 19:17	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			10/14/22 19:17	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/14/22 19:17	1
Chloroform	ND		1.0	0.60	ug/L			10/14/22 19:17	1
Chloromethane	ND		1.0	0.90	ug/L			10/14/22 19:17	1
cis-1,2-Dichloroethene	6.0		1.0	0.71	ug/L			10/14/22 19:17	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			10/14/22 19:17	1
Ethylbenzene	ND		1.0	0.51	ug/L			10/14/22 19:17	1
Methylene Chloride	ND		1.0	0.89	ug/L			10/14/22 19:17	1
Tetrachloroethene	ND		1.0	0.47	ug/L			10/14/22 19:17	1
Toluene	ND		1.0	0.46	ug/L			10/14/22 19:17	1
trans-1,2-Dichloroethene	4.4		1.0	0.67	ug/L			10/14/22 19:17	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			10/14/22 19:17	1
Trichloroethene	2.9		1.0	0.69	ug/L			10/14/22 19:17	1
Vinyl chloride	8.2		1.0		ug/L			10/14/22 19:17	1
Dibromochloromethane	ND		1.0	0.84	ug/L			10/14/22 19:17	1
Bromodichloromethane	ND		1.0	0.64	ug/L			10/14/22 19:17	1
Surrogate	%Recovery Q	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		28 - 163					10/14/22 19:17	1
4-Bromofluorobenzene (Surr)	88		41 - 122					10/14/22 19:17	1
Toluene-d8 (Surr)	116		53 - 125					10/14/22 19:17	1
Dibromofluoromethane (Surr)	121		59 - 168					10/14/22 19:17	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	2.2	Н	1.0	0.31	ug/L			10/17/22 21:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90	-	28 - 163			-		10/17/22 21:13	1
4-Bromofluorobenzene (Surr)	93		41 - 122					10/17/22 21:13	1
Toluene-d8 (Surr)	116		53 - 125					10/17/22 21:13	1
Dibromofluoromethane (Surr)	116		59 - 168					10/17/22 21:13	1

11/11/2022

Lab Sample ID: 180-146143-3 Client Sample ID: EFFLUENT (101122)

Date Collected: 10/11/22 13:20 Date Received: 10/13/22 10:40

Matrix: Water

Job ID: 180-146143-1

Method: 40CFR136A EPA 6 Analyte		Qualifier	ompounds RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	3.0	ug/L		-	10/14/22 17:58	5
1,1,2,2-Tetrachloroethane	ND	*+	5.0		ug/L			10/14/22 17:58	5
1,1,2-Trichloroethane	ND		5.0		ug/L			10/14/22 17:58	5
1,1-Dichloroethane	ND	*+	5.0	1.5	ug/L			10/14/22 17:58	5
1,1-Dichloroethene	ND	*+	5.0		ug/L			10/14/22 17:58	5
1,2-Dichloroethane	60		5.0	2.9	ug/L			10/14/22 17:58	5
1,2-Dichloropropane	ND		5.0	3.3	ug/L			10/14/22 17:58	5
1,2-Dichlorobenzene	ND		5.0	1.8	ug/L			10/14/22 17:58	5
1,3-Dichlorobenzene	ND		5.0	2.5	ug/L			10/14/22 17:58	5
1,4-Dichlorobenzene	ND		5.0	2.7	ug/L			10/14/22 17:58	5
2-Chloroethyl vinyl ether	ND		10	8.6	ug/L			10/14/22 17:58	5
Acrolein	ND		100	80	ug/L			10/14/22 17:58	5
Acrylonitrile	ND		100	39	ug/L			10/14/22 17:58	5
Benzene	ND		5.0		ug/L			10/14/22 17:58	5
Bromoform	ND		5.0	4.9	ug/L			10/14/22 17:58	5
Bromomethane	ND		5.0	4.4	ug/L			10/14/22 17:58	5
Carbon disulfide	ND	*+	5.0	4.4	ug/L			10/14/22 17:58	5
Carbon tetrachloride	ND		5.0	4.4	ug/L			10/14/22 17:58	5
Chlorobenzene	ND		5.0	2.5	ug/L			10/14/22 17:58	5
Chloroform	ND		5.0	3.0	ug/L			10/14/22 17:58	5
Chloromethane	ND		5.0	4.5	ug/L			10/14/22 17:58	5
cis-1,2-Dichloroethene	4.0	J	5.0	3.5	ug/L			10/14/22 17:58	5
cis-1,3-Dichloropropene	ND		5.0	3.0	ug/L			10/14/22 17:58	5
Ethylbenzene	ND		5.0	2.5	ug/L			10/14/22 17:58	5
Methylene Chloride	ND		5.0	4.4	ug/L			10/14/22 17:58	5
Tetrachloroethene	ND		5.0	2.3	ug/L			10/14/22 17:58	5
Toluene	ND		5.0	2.3	ug/L			10/14/22 17:58	5
trans-1,2-Dichloroethene	3.8	J	5.0	3.4	ug/L			10/14/22 17:58	5
trans-1,3-Dichloropropene	ND		5.0	2.9	ug/L			10/14/22 17:58	5
Trichloroethene	4.1	J	5.0	3.4	ug/L			10/14/22 17:58	5
Vinyl chloride	4.8	J	5.0	2.0	ug/L			10/14/22 17:58	5
Dibromochloromethane	ND		5.0	4.2	ug/L			10/14/22 17:58	5
Bromodichloromethane	ND		5.0	3.2	ug/L			10/14/22 17:58	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		28 - 163			-		10/14/22 17:58	5
4-Bromofluorobenzene (Surr)	94		41 - 122					10/14/22 17:58	5
Toluene-d8 (Surr)	119		53 - 125					10/14/22 17:58	5

Client Sample ID: TRIP BLANK Lab Sample ID: 180-146143-4 Date Collected: 10/11/22 00:00 **Matrix: Water**

59 - 168

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Date Received: 10/13/22 10:40

Dibromofluoromethane (Surr)

Method: 40CFR136A EPA 624.1 - Volatile Organic Compounds (GC/MS)										
	Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			10/14/22 13:59	1
	1,1,2,2-Tetrachloroethane	ND	*+	1.0	0.60	ug/L			10/14/22 13:59	1
	1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			10/14/22 13:59	1
	1,1-Dichloroethane	ND	*+	1.0	0.31	ug/L			10/14/22 13:59	1

Eurofins Pittsburgh

10/14/22 17:58

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 180-146143-1

Project/Site: Cytec Havre de Grace MD

Client Sample ID: TRIP BLANK

Lab Sample ID: 180-146143-4

Date Collected: 10/11/22 00:00 **Matrix: Water** Date Received: 10/13/22 10:40

Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	MD	*+	1.0	0.55	ug/L			10/14/22 13:59	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			10/14/22 13:59	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			10/14/22 13:59	1
1,2-Dichlorobenzene	ND		1.0	0.36	ug/L			10/14/22 13:59	1
1,3-Dichlorobenzene	ND		1.0	0.50	ug/L			10/14/22 13:59	1
1,4-Dichlorobenzene	ND		1.0	0.54	ug/L			10/14/22 13:59	1
2-Chloroethyl vinyl ether	ND		2.0	1.7	ug/L			10/14/22 13:59	1
Acrolein	ND		20	16	ug/L			10/14/22 13:59	1
Acrylonitrile	ND		20	7.8	ug/L			10/14/22 13:59	1
Benzene	ND		1.0	0.60	ug/L			10/14/22 13:59	1
Bromoform	ND		1.0	0.98	ug/L			10/14/22 13:59	1
Bromomethane	ND		1.0	0.89	ug/L			10/14/22 13:59	1
Carbon disulfide	ND	*+	1.0	0.88	ug/L			10/14/22 13:59	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			10/14/22 13:59	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/14/22 13:59	1
Chloroform	ND		1.0	0.60	ug/L			10/14/22 13:59	1
Chloromethane	ND		1.0	0.90	ug/L			10/14/22 13:59	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			10/14/22 13:59	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			10/14/22 13:59	1
Ethylbenzene	ND		1.0	0.51	ug/L			10/14/22 13:59	1
Methylene Chloride	ND		1.0	0.89	ug/L			10/14/22 13:59	1
Tetrachloroethene	ND		1.0	0.47	ug/L			10/14/22 13:59	1
Toluene	ND		1.0	0.46	ug/L			10/14/22 13:59	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			10/14/22 13:59	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			10/14/22 13:59	1
Trichloroethene	ND		1.0	0.69	ug/L			10/14/22 13:59	1
Vinyl chloride	ND		1.0	0.40	ug/L			10/14/22 13:59	1
Dibromochloromethane	ND		1.0	0.84	ug/L			10/14/22 13:59	1
Bromodichloromethane	ND		1.0	0.64	ug/L			10/14/22 13:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		28 - 163					10/14/22 13:59	1
4-Bromofluorobenzene (Surr)	85		41 - 122					10/14/22 13:59	1
Toluene-d8 (Surr)	106		53 - 125					10/14/22 13:59	1
Dibromofluoromethane (Surr)	120		59 - 168					10/14/22 13:59	1

Job ID: 180-146143-1

Project/Site: Cytec Havre de Grace MD

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

MB MB

Lab Sample ID: MB 180-415073/7

Matrix: Water

Analysis Batch: 415073

Client: ARCADIS U.S., Inc.

Client Sample ID: Method Blank

Prep Type: Total/NA

	INID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			10/14/22 13:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.60	ug/L			10/14/22 13:32	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			10/14/22 13:32	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			10/14/22 13:32	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			10/14/22 13:32	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			10/14/22 13:32	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			10/14/22 13:32	1
1,2-Dichlorobenzene	ND		1.0	0.36	ug/L			10/14/22 13:32	1
1,3-Dichlorobenzene	ND		1.0	0.50	ug/L			10/14/22 13:32	1
1,4-Dichlorobenzene	ND		1.0	0.54	ug/L			10/14/22 13:32	1
2-Chloroethyl vinyl ether	ND		2.0	1.7	ug/L			10/14/22 13:32	1
Acrolein	ND		20	16	ug/L			10/14/22 13:32	1
Acrylonitrile	ND		20	7.8	ug/L			10/14/22 13:32	1
Benzene	ND		1.0	0.60	ug/L			10/14/22 13:32	1
Bromoform	ND		1.0	0.98	ug/L			10/14/22 13:32	1
Bromomethane	ND		1.0	0.89	ug/L			10/14/22 13:32	1
Carbon disulfide	ND		1.0	0.88	ug/L			10/14/22 13:32	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			10/14/22 13:32	1
Chlorobenzene	ND		1.0	0.50	ug/L			10/14/22 13:32	1
Chloroform	ND		1.0	0.60	ug/L			10/14/22 13:32	1
Chloromethane	ND		1.0	0.90	ug/L			10/14/22 13:32	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			10/14/22 13:32	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			10/14/22 13:32	1
Ethylbenzene	ND		1.0	0.51	ug/L			10/14/22 13:32	1
Methylene Chloride	ND		1.0	0.89	ug/L			10/14/22 13:32	1
Tetrachloroethene	ND		1.0	0.47	ug/L			10/14/22 13:32	1
Toluene	ND		1.0	0.46	ug/L			10/14/22 13:32	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			10/14/22 13:32	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			10/14/22 13:32	1
Trichloroethene	ND		1.0	0.69	ug/L			10/14/22 13:32	1
Vinyl chloride	ND		1.0	0.40	ug/L			10/14/22 13:32	1
Dibromochloromethane	ND		1.0	0.84	ug/L			10/14/22 13:32	1
Bromodichloromethane	ND		1.0	0.64	ug/L			10/14/22 13:32	1

	MB	MB
rrogato	%Pacayary	Ous

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96	28 - 163	10	0/14/22 13:32	1
4-Bromofluorobenzene (Surr)	108	41 - 122	10	0/14/22 13:32	1
Toluene-d8 (Surr)	122	53 - 125	10	0/14/22 13:32	1
Dibromofluoromethane (Surr)	118	59 - 168	10	0/14/22 13:32	1

Lab Sample ID: LCS 180-415073/5

Matrix: Water

Analysis Batch: 415073

•	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1,1-Trichloroethane	10.0	9.99		ug/L		100	70 - 130	
1,1,2,2-Tetrachloroethane	10.0	16.1	*+	ug/L		161	60 - 140	
1,1,2-Trichloroethane	10.0	10.1		ug/L		101	70 - 130	

Eurofins Pittsburgh

Prep Type: Total/NA

Client Sample ID: Lab Control Sample

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Client: ARCADIS U.S., Inc. Job ID: 180-146143-1

Project/Site: Cytec Havre de Grace MD

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-415073/5

Matrix: Water

Analysis Batch: 415073

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1-Dichloroethane	10.0	15.3	*+	ug/L		153	70 - 130	
1,1-Dichloroethene	10.0	16.5	*+	ug/L		165	50 - 150	
1,2-Dichloroethane	10.0	7.86		ug/L		79	70 - 130	
1,2-Dichloropropane	10.0	11.9		ug/L		119	35 - 165	
1,2-Dichlorobenzene	10.0	9.05		ug/L		91	65 - 135	
1,3-Dichlorobenzene	10.0	8.72		ug/L		87	70 - 130	
1,4-Dichlorobenzene	10.0	9.03		ug/L		90	65 - 135	
2-Chloroethyl vinyl ether	20.0	15.5		ug/L		77	10 - 170	
Acrolein	30.0	29.4		ug/L		98	60 - 140	
Acrylonitrile	100	137		ug/L		137	60 - 140	
Benzene	10.0	10.1		ug/L		101	65 - 135	
Bromoform	10.0	10.6		ug/L		106	70 - 130	
Bromomethane	10.0	6.23		ug/L		62	15 - 170	
Carbon disulfide	10.0	16.2	*+	ug/L		162	50 - 152	
Carbon tetrachloride	10.0	11.3		ug/L		113	70 - 130	
Chlorobenzene	10.0	8.22		ug/L		82	65 - 135	
Chloroform	10.0	9.67		ug/L		97	70 - 135	
Chloromethane	10.0	15.6		ug/L		156	10 - 170	
cis-1,2-Dichloroethene	10.0	10.5		ug/L		105	67 - 124	
cis-1,3-Dichloropropene	10.0	8.32		ug/L		83	25 - 170	
Ethylbenzene	10.0	9.00		ug/L		90	60 - 140	
Methylene Chloride	10.0	13.8		ug/L		138	60 - 140	
Tetrachloroethene	10.0	9.78		ug/L		98	70 - 130	
Toluene	10.0	12.2		ug/L		122	70 - 130	
trans-1,2-Dichloroethene	10.0	12.9		ug/L		129	70 - 130	
trans-1,3-Dichloropropene	10.0	8.78		ug/L		88	50 - 150	
Trichloroethene	10.0	8.52		ug/L		85	65 - 135	
Vinyl chloride	10.0	14.4		ug/L		144	10 - 170	
Dibromochloromethane	10.0	10.0		ug/L		100	70 - 135	

10.0

8.93

ug/L

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	72		28 - 163
4-Bromofluorobenzene (Surr)	94		41 - 122
Toluene-d8 (Surr)	116		53 - 125
Dibromofluoromethane (Surr)	96		59 - 168

Lab Sample ID: MB 180-415270/5

Matrix: Water

Bromodichloromethane

Analysis Batch: 415270

Client Sample ID: Method Blank Prep Type: Total/NA

65 - 135

MB MB Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac 1,1-Dichloroethane 1.0 10/17/22 15:02 ND 0.31 ug/L

	МВ	МВ				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	66		28 - 163		10/17/22 15:02	1
4-Bromofluorobenzene (Surr)	97		41 - 122		10/17/22 15:02	1
Toluene-d8 (Surr)	116		53 - 125		10/17/22 15:02	1

Eurofins Pittsburgh

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11/11/2022

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 180-146143-1

Project/Site: Cytec Havre de Grace MD

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-415270/5

Matrix: Water

Analysis Batch: 415270

Client Sample ID: Method Blank

Prep Type: Total/NA

MB MB

Dil Fac Surrogate %Recovery Qualifier Limits Prepared Analyzed Dibromofluoromethane (Surr) 86 59 - 168 10/17/22 15:02

Lab Sample ID: LCS 180-415270/3

Matrix: Water

Analysis Batch: 415270 Spike LCS LCS %Rec Added Result Qualifier Limits Analyte Unit D %Rec

1,1-Dichloroethane 10.0 11.1 ug/L

LCS LCS Surrogate %Recovery Qualifier Limits 1,2-Dichloroethane-d4 (Surr) 28 - 163 65 4-Bromofluorobenzene (Surr) 115 41 - 122 Toluene-d8 (Surr) 122 53 - 125 59 - 168 Dibromofluoromethane (Surr) 81

Client Sample ID: Lab Control Sample

111

70 - 130

Prep Type: Total/NA

QC Association Summary

Client: ARCADIS U.S., Inc. Job ID: 180-146143-1

Project/Site: Cytec Havre de Grace MD

GC/MS VOA

Analysis Batch: 415073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-146143-1	EW-1 (101122)	Total/NA	Water	EPA 624.1	
180-146143-2	MW-10D (101122)	Total/NA	Water	EPA 624.1	
180-146143-3	EFFLUENT (101122)	Total/NA	Water	EPA 624.1	
180-146143-4	TRIP BLANK	Total/NA	Water	EPA 624.1	
MB 180-415073/7	Method Blank	Total/NA	Water	EPA 624.1	
LCS 180-415073/5	Lab Control Sample	Total/NA	Water	EPA 624.1	

Analysis Batch: 415270

Lab Sample ID 180-146143-2 - RA	Client Sample ID MW-10D (101122)	Prep Type Total/NA	Matrix Water	Method EPA 624.1	Prep Batch
MB 180-415270/5	Method Blank	Total/NA	Water	EPA 624.1	
LCS 180-415270/3	Lab Control Sample	Total/NA	Water	EPA 624.1	

Ver 06/08/202

Cooler Temperature(s) "C and Other Remarks:

Chain of Custody Record Phone: 143-936-9019 Compliance Project: A Yes A No Sampler D. Krower TAT Requested (days): Due Date Requested: PO #: 30005455 0002. WO #: Sample Date Project #: 18017987 SSOW#: #20J Eurofins TestAmerica, Pittsburgh Phone: 412-963-7058 Fax: 412-963-2468 101122 shwetha.sridharan@arcadis.com 7550 Teague Road Suite 210 301 Alpha Drive RIDC Park Project Name: Cytec Havre de Grace MD Client Information Client Contact: Ms. Shwetha Sridharan Pittsburgh PA 15238 Sompany. ARCADIS U.S. Inc. 302-897-8993(Tel) State, Zip: MD 21076

Matrix

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Environmer America

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COC No: 180-72855-14121 1

Carrier Tracking No(s) State of Origin.

Page: Page 1 of 2

Preservation Codes:

Analysis Requested

E-Mai Jill Colussy@Eurofinset.com

:QISM

Hanover

Lab PM: Colussy Jill L

None
Ashao2
Na2045
Na2045
Na2S03
Na2S203
Na2S203
TSP Dodecahydrate
Acetone
MCAA
O ph 4-5
other (specify)

Amchior Ascorbic Acid

Ice DI Water EDTA EDA

A HCL
B NaOH
C Zn Acetate
C Zn Acetate
E NaHSO4
F MeOH
G Amchlor
H Ascorbic Ac

Sample Disposal (A fee may be as essed if samples are retained longer than 1 month)
Return To Client Disposal By Lab Archive For Month Total Number of containers K!/01 Date/Time Method of Shipment: Special Instructions/QC Requirements. Time. Date/Time: 1012/22/54 Arcads (Winwater Sesoild, Onwastefel Preservation Code Radiological Sample
Type
(C=comp,
G=grab) Sample 1300 1320 30 Date: Unknown 0/11/22 Poison B Skin Irritant Deliverable Requested I, II, III IV Other (specify) non Flammable Possible Hazard Identification Empty Kit Relinquished by Sample Identification 2500 <u>ار</u> telinquished by: inquished by: nquished by

Custody Seal No.

Custody Seals Intact: △ Yes △ No

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 180-146143-1

Login Number: 146143 List Source: Eurofins Pittsburgh

List Number: 1

Creator: Kovitch, Christina M

Creator: Novitch, Christina M		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

4

9

10

12

Appendix C

Monthly Compliance Reports – 2022



Cytec Solvay Group 1300 Revolution Street Havre de Grace, MD 21078 410.939.1910

January 11, 2022

Ms. Jennie Kilby Industrial Pretreatment Coordinator City of Havre de Grace Department of Public Works 711 Pennington Avenue Havre de Grace, Maryland 21078

Re: CYTEC SOLVAY GROUP AEROSPACE MATERIALS

Periodic Compliance Report – December 2021

Permit Number: CYT-2015-101

Dear Ms. Kilby:

CYTEC SOLVAY GROUP (Cytec) has prepared this Periodic Compliance Report for the month of December 2021 in accordance with the conditions set forth in Cytec's Industrial User Wastewater Discharge Permit (Permit No. CYT-2015-101). This Periodic Compliance Report presents the results of all monitoring requirements and operational issues encountered during the month of December 2021. The monthly certification form is included as Attachment A.

For the month of December, the system pumped an estimated 82,766 gallons of wastewater at an estimated average flow rate of 1.85 gallons per minute to the City of Havre de Grace Wastewater Treatment Plant during active system operation. The estimated average flow rate of 1.85 gallons per minute for the month of December satisfied both permit flow limitations (maximum of 30,000 gallons per day; 30-minute maximum of 1,000 gallons). Cytec complied with all permit conditions for flow for the month of December.

One pH meter is presently installed in-line with the effluent discharge pipe to measure pH continuously. pH results from the effluent wastewater complied with all permit conditions for pH during the month of December and no significant deviations were noted during active operation. Table 1 presents the daily flow volumes and weekly pH readings recorded for the month of December.

On November 25, an E-stop alarm was received. This alarm may occur when the facility experiences a power fluctuation and requires a system reset. After the November 25, 2021 alarm, the system remained shut down due to concerns with running the EW-02 well dry, as the water-level transducer in the well was faulty. Additionally, the remote system access was not functioning and required Arcadis staff to reset the system on-site. The alarm was cleared by Arcadis personnel and the system restarted on December 9, 2021. On December 9, 2021, Arcadis staff were onsite to replace a faulty pH probe and to replace the water-level transducer at EW-02. An EW-01 transducer failure alarm was received on December 18, and the system was automatically shut down. The transducer at EW-01 may need to be replaced and will be inspected during the next Arcadis site visit in January. On December 16, an EW-02 pipe leak alarm was received and the system was automatically shut down. This alarm typically occurs during rain events when runoff infiltrates the vaults, triggering the alarm. Arcadis staff reset the alarm on December 16. Several high differential flow warning alarms were received on December 17 and December 21. These

alarms may indicate a leak in the system if the effluent flow is higher than the influent flow. However, these alarms may also be triggered if there are a string of other alarms. The system remains shut down until Arcadis staff can determine the cause of the alarms on January 11. On December 22, an EW-01 pipe leak alarm was received while the system was already shut down; this alarm typically occurs during rain events when runoff infiltrates the vaults, triggering the alarm. The system remained off after the December 22 alarm.

The January 2022 Periodic Compliance Report will be submitted in February 2022. Daily flow and pH will continue to be measured continuously. If the system is shut down for a period of at least 24 hours, pH results will be monitored and reported for three consecutive days to maintain compliance with permit conditions.

If you have any questions or comments, please contact me at 443-252-1093.

Sincerely, Cytec Solvay Group

Jose Cortez HSE Manager

Enclosure

cc: Mr. Luis Pizarro, United States Environmental Protection Agency

Mr. Paul Nemanic, Cytec Solvay Group Ms. Tina Armstrong, Ph.D., Arcadis Ms. Shwetha Sridharan, Arcadis

Table 1
Flow and pH Monitoring for December 2021
Cytec Solvay Group
Havre de Grace, Maryland

Date	Cumulative Total Gallons Extracted (MW-10D)	Cumulative Total Gallons Extracted (EW-01)	Cumulative Total Gallons Extracted (EW-02)	Combined Cumulative Total Gallons Extracted	Daily Total Gallons Extracted	рН
12/01/21	19,177,847	4,331,232	3,311,987	26,821,066	0	
12/02/21	19,177,847	4,331,232	3,311,987	26,821,066	0	
12/03/21	19,177,847	4,331,232	3,311,987	26,821,066	0	
12/04/21	19,177,847	4,331,232	3,311,987	26,821,066	0	
12/05/21	19,177,847	4,331,232	3,311,987	26,821,066	0	
12/06/21	19,177,847	4,331,232	3,311,987	26,821,066	0	
12/07/21	19,177,847	4,331,232	3,311,987	26,821,066	0	
12/08/21	19,177,847	4,331,232	3,311,987	26,821,066	0	
12/09/21	19,177,847	4,331,232	3,311,987	26,821,066	13,777	5.67
12/10/21	19,188,659	4,333,286	3,312,898	26,834,843	0	5.93
12/11/21	19,188,659	4,333,286	3,312,898	26,834,843	0	5.86
12/12/21	19,188,659	4,333,286	3,312,898	26,834,843	0	
12/13/21	19,188,659	4,333,286	3,312,898	26,834,843	10,156	5.88
12/14/21	19,194,950	4,334,474	3,315,575	26,844,999	14,461	5.40
12/15/21	19,203,937	4,336,171	3,319,353	26,859,460	14,461	5.46
12/16/21	19,212,923	4,337,867	3,323,131	26,873,921	14,460	
12/17/21	19,221,870	4,339,555	3,326,956	26,888,381	1,654	5.53
12/18/21	19,222,893	4,339,747	3,327,395	26,890,035	0	
12/19/21	19,222,893	4,339,747	3,327,395	26,890,035	0	
12/20/21	19,222,893	4,339,747	3,327,395	26,890,035	6,933	5.43
12/21/21	19,227,692	4,339,747	3,329,529	26,896,968	6,864	5.49
12/22/21	19,232,448	4,339,747	3,331,637	26,903,832	0	5.51
12/23/21	19,232,448	4,339,747	3,331,637	26,903,832	0	
12/24/21	19,232,448	4,339,747	3,331,637	26,903,832	0	
12/25/21	19,232,448	4,339,747	3,331,637	26,903,832	0	
12/26/21	19,232,448	4,339,747	3,331,637	26,903,832	0	
12/27/21	19,232,448	4,339,747	3,331,637	26,903,832	0	
12/28/21	19,232,448	4,339,747	3,331,637	26,903,832	0	
12/29/21	19,232,448	4,339,747	3,331,637	26,903,832	0	
12/30/21	19,232,448	4,339,747	3,331,637	26,903,832	0	
12/31/21	19,232,448	4,339,747	3,331,637	26,903,832	0	

Notes:

- 1. Operation of the expanded system began on January 16, 2015.
- 2. Totalizer readings are collected daily at 0800 at EW-01 and EW-02. In May 2018, the totalizer at MW-10D rolled over to a value greater than 10 million and the value was no longer presented on the system data tab. As a result, the totalizer reading was estimated between May 2018 and August 2019, based on the total flow in gallons recorded for the previous 24 hours. A system update was completed in August 2019 that reduced the totalizer reading for MW-10D by 10 million gallons.
- 3. Italics indicates estimated value for monthly and daily flow.

Table 2 Operational Issues for December 2021 Cytec Solvay Group Havre de Grace, Maryland

Date	Root Cause for Alarm	Response
11/25/2021 - 12/9/2021	P-100/P-200 Drive Fault	A P-100 and P-200 drive fault alarm was received and the system was automatically shut down. This alarm may occur when the facility experiences a power fluctuation and requires a system reset. The system was not restarted immediately due to the faulty transducer at EW-02 and concerns about running the well dry. Additionally, the remote system access was not functioning and required Arcadis staff to reset the system on-site. The alarm was cleared by on-site personnel and the system was restarted on 12/9/2021.
12/9/2021	Routine O&M	Arcadis staff were onsite to replace faulty pH probe and water-level transducer at EW-02.
12/16/2021	EW-02 Pipe Leak	An EW-02 pipe leak alarm was received and the system was automatically shut down. This alarm typically occurs during rain events when runoff infiltrates the vault. Arcadis staff restarted the system within 24 hours.
12/18/2021	EW-01 Transducer Alarm	An EW-01 transducer alarm was received and the system was automatically shut down. Arcadis staff restarted the system on 12/20, without running EW-01. Arcadis staff will respond to this alarm in January to determine if the transducer needs to be replaced.
12/17/2021 & 12/21/2021	High Differential Flow	Multiple high differential flow alarms were received. These alarms may indicate a leak in the system if the effluent flow is higher than the influent flow. However, these alarms may also be triggered if there are a string of other alarms. The system remains shut down since 12/21 until Arcadis staff can determine the cause of the alarms in January.
12/22/2021	EW-01 Pipe Leak	An EW-01 pipe leak alarm was received while the system was already shut down. This alarm typically occurs during rain events when runoff infiltrates the vault. Arcadis staff cleared the alarm and the system remains turned off until January.

Attachment A

Attachment A

CYTEC SOLVAY GROUP PERIODIC COMPLIANCE REPORT

REPORTING MONTH/YEAR	December 2021	
TOTAL VOLUME DISCHARGED	82,766 Gallons	
supervision in accordance with a syste evaluate the information submitted. Bar or those persons directly responsible for my knowledge and belief, true, accurat	document and all attachments were preparem designed to assure that qualified perso sed on my inquiry of the person or persons r gathering the information, the information see, and complete. I am aware that there are the possibility of fine and imprisonment for	nnel properly gather and who manage the system, submitted is, to the best of e significant penalties for
Date	Authorized Representative	



Cytec Solvay Group 1300 Revolution Street Havre de Grace, MD 21078 410.939.1910

February 4, 2022

Ms. Jennie Kilby Industrial Pretreatment Coordinator City of Havre de Grace Department of Public Works 711 Pennington Avenue Havre de Grace, Maryland 21078

Re: CYTEC SOLVAY GROUP AEROSPACE MATERIALS

Periodic Compliance Report – January 2022

Permit Number: CYT-2015-101

Dear Ms. Kilby:

CYTEC SOLVAY GROUP (Cytec) has prepared this Periodic Compliance Report for the month of January 2022 in accordance with the conditions set forth in Cytec's Industrial User Wastewater Discharge Permit (Permit No. CYT-2015-101). This Periodic Compliance Report presents the results of all monitoring requirements and operational issues encountered during the month of January 2022. The monthly certification form is included as Attachment A.

For the month of January, the system pumped an estimated 55,402 gallons of wastewater at an estimated average flow rate of 1.24 gallons per minute to the City of Havre de Grace Wastewater Treatment Plant during active system operation. The estimated average flow rate of 1.24 gallons per minute for the month of January satisfied both permit flow limitations (maximum of 30,000 gallons per day; 30-minute maximum of 1,000 gallons). Cytec complied with all permit conditions for flow for the month of January.

One pH meter is presently installed in-line with the effluent discharge pipe to measure pH continuously. pH results from the effluent wastewater complied with all permit conditions for pH during the month of January and no significant deviations were noted during active operation. Table 1 presents the daily flow volumes and weekly pH readings recorded for the month of January.

On December 17 and 21, 2021, several high differential flow warning alarms were received. These alarms may indicate a leak in the system if the effluent flow is higher than the influent flow. However, these alarms may also be triggered if there are a string of other alarms. The system remained shut down until Arcadis staff could determine the cause of the alarms on January 11, 2022. The system was restarted on January 11 when Arcadis staff were onsite for routine O&M and sampling. On January 15, an EW-01 low level alarm was received and on January 16, a drive fault alarm was received. The system was automatically shut down and the remote system access was not responsive. Alarms were cleared by onsite personnel on January 20. An EW-01 low level alarm may be triggered if the water level in the extraction well is too low. The drive fault alarms may be triggered if the facility experiences a power fluctuation and requires a system reset.

An E-stop alarm was triggered on January 20, while the system remained shut down. Also on January 20, the POTW notified Arcadis that there may be a potential leak at the POTW discharge point, prior to the

Cytec system water entering the digester. The system was remained shut down until Arcadis staff were onsite to inspect for any possible leaks on February 1. On January 24, a MW-10D high level alarm was received, this alarm may be triggered when water levels in MW-10D rise due to prolonged system shutdown. On January 27, Arcadis staff were onsite to inspect the discharge pipes at the POTW and to restart the router so that remote system access could be reestablished, but the system remained shut down. On February 1, Arcadis staff restarted the system and determined that there were no visible leaks at the POTW discharge point and replaced corroded pipe connections at the POTW.

The February Compliance Report will be submitted in March 2022. Daily flow and pH will continue to be measured continuously. If the system is shut down for a period of at least 24 hours, pH results will be monitored and reported for three consecutive days to maintain compliance with permit conditions.

If you have any questions or comments, please contact me at 443-252-1093.

Sincerely, Cytec Solvay Group

Jose Cortez HSE Manager

Enclosure

cc: Mr. Luis Pizarro, United States Environmental Protection Agency

Mr. Paul Nemanic, Cytec Solvay Group Ms. Tina Armstrong, Ph.D., Arcadis Ms. Shwetha Sridharan, Arcadis

Table 1 Flow and pH Monitoring for January 2022 Cytec Solvay Group Havre de Grace, Maryland

Date	Cumulative Total Gallons Extracted (MW-10D)	Cumulative Total Gallons Extracted (EW-01)	Cumulative Total Gallons Extracted (EW-02)	Combined Cumulative Total Gallons Extracted	Daily Total Gallons Extracted	pН
01/01/22	19,232,448	4,339,747	3,331,637	26,903,832	0	
01/02/22	19,232,448	4,339,747	3,331,637	26,903,832	0	
01/03/22	19,232,448	4,339,747	3,331,637	26,903,832	0	
01/04/22	19,232,448	4,339,747	3,331,637	26,903,832	0	
01/05/22	19,232,448	4,339,747	3,331,637	26,903,832	0	
01/06/22	19,232,448	4,339,747	3,331,637	26,903,832	0	
01/07/22	19,232,448	4,339,747	3,331,637	26,903,832	0	
01/08/22	19,232,448	4,339,747	3,331,637	26,903,832	0	
01/09/22	19,232,448	4,339,747	3,331,637	26,903,832	0	
01/10/22	19,232,448	4,339,747	3,331,637	26,903,832	0	
01/11/22	19,232,448	4,339,747	3,331,637	26,903,832	28	
01/12/22	19,232,468	4,339,751	3,331,641	26,903,860	12,084	
01/13/22	19,239,908	4,341,163	3,334,873	26,915,944	14,613	
01/14/22	19,248,899	4,342,871	3,338,787	26,930,557	14,647	
01/15/22	19,257,892	4,344,581	3,342,731	26,945,204	14,030	
01/16/22	19,267,250	4,344,997	3,346,987	26,959,234	0	
01/17/22	19,267,250	4,344,997	3,346,987	26,959,234	0	
01/18/22	19,267,250	4,344,997	3,346,987	26,959,234	0	
01/19/22	19,267,250	4,344,997	3,346,987	26,959,234	0	
01/20/22	19,267,250	4,344,997	3,346,987	26,959,234	0	
01/21/22	19,267,250	4,344,997	3,346,987	26,959,234	0	
01/22/22	19,267,250	4,344,997	3,346,987	26,959,234	0	
01/23/22	19,267,250	4,344,997	3,346,987	26,959,234	0	
01/24/22	19,267,250	4,344,997	3,346,987	26,959,234	0	
01/25/22	19,267,250	4,344,997	3,346,987	26,959,234	0	
01/26/22	19,267,250	4,344,997	3,346,987	26,959,234	0	
01/27/22	19,267,250	4,344,997	3,346,987	26,959,234	0	
01/28/22	19,267,250	4,344,997	3,346,987	26,959,234	0	
01/29/22	19,267,250	4,344,997	3,346,987	26,959,234	0	
01/30/22	19,267,250	4,344,997	3,346,987	26,959,234	0	
01/31/22	19,267,250	4,344,997	3,346,987	26,959,234	0	

Notes:

- 1. Operation of the expanded system began on January 16, 2015.
- 2. Totalizer readings are collected daily at 0800 at EW-01 and EW-02. In May 2018, the totalizer at MW-10D rolled over to a value greater than 10 million and the value was no longer presented on the system data tab. As a result, the totalizer reading was estimated between May 2018 and August 2019, based on the total flow in gallons recorded for the previous 24 hours. A system update was completed in August 2019 that reduced the totalizer reading for MW-10D by 10 million gallons.
- 3. Italics indicates estimated value for monthly and daily flow.

Table 2 Operational Issues for January 2022 Cytec Solvay Group Havre de Grace, Maryland

Date	Root Cause for Alarm	Response
12/17/2021 & 12/21/2021	High Differential Flow	Multiple high differential flow alarms were received during this time. These alarms may indicate a leak in the system if the effluent flow is higher than the influent flow. However, these alarms may also be triggered if there are a string of other alarms. The system remained shut down from 12/21 to 1/11, when Arcadis staff were onsite to determine the cause of the alarms.
1/11/2022 - 1/12/2022	Routine O&M	Arcadis staff were onsite to conduct quarterly system sampling and to troubleshoot the system alarms. Arcadis staff determined the EW-01 transducer alarm from 12/18 was a false alarm and transducer is working properly.
1/15/2022	EW-01 Low Level	An EW-01 low level alarm was received and the system was automatically shut down. This alarm may be triggered if the water level in the extraction well is low. Additionally, the remote system access was unresponsive so the system could not be turned back on. The system remained shut down for the rest of the month. The alarm was cleared by onsite personnel on 1/20.
1/16/2022	Drive Fault	A P-100 and P-200 drive fault alarm was received and the system was automatically shut down. This alarm may occur when the facility experiences a power fluctuation and requires a system reset. The alarm was cleared by onsite personnel on 1/20 but the system remained shut down.
1/20/2022	E-Stop and POTW leak	An E-stop alarm was received on 1/20, while the system remained shut down. The POTW facility notified Cytec that there may be a potential leak at the POTW pipe, prior to the system water entering the digester. Arcadis staff restarted the system on 2/1, determined there were no leaks present, and replaced corroded pipe at the POTW.
1/24/2022	MW-10D High Level	A MW-10D high level alarm was received while the system remained shut down. This alarm may be triggered when water levels in MW-10D rise due to prolonged system shutdown.
1/27/2022	N/A	Arcadis staff were onsite to check the pipes at POTW and to restart the router so that remote system access could be reestablished.

Attachment A

Attachment A

CYTEC SOLVAY GROUP PERIODIC COMPLIANCE REPORT

REPORTING MONTH/YEAR	January 2022	
TOTAL VOLUME DISCHARGED	55,402 Gallons	
supervision in accordance with a syste evaluate the information submitted. Bar or those persons directly responsible for my knowledge and belief, true, accurat	document and all attachments were preparem designed to assure that qualified perso sed on my inquiry of the person or persons r gathering the information, the information see, and complete. I am aware that there are the possibility of fine and imprisonment for	nnel properly gather and who manage the system, submitted is, to the best of e significant penalties for
 Date	Authorized Representative	



Cytec Solvay Group 1300 Revolution Street Havre de Grace, MD 21078 410.939.1910

March 7, 2022

Ms. Jennie Kilby Industrial Pretreatment Coordinator City of Havre de Grace Department of Public Works 711 Pennington Avenue Havre de Grace, Maryland 21078

Re: CYTEC SOLVAY GROUP AEROSPACE MATERIALS

Periodic Compliance Report – February 2022

Permit Number: CYT-2015-101

Dear Ms. Kilby:

CYTEC SOLVAY GROUP (Cytec) has prepared this Periodic Compliance Report for the month of February 2022 in accordance with the conditions set forth in Cytec's Industrial User Wastewater Discharge Permit (Permit No. CYT-2015-101). This Periodic Compliance Report presents the results of all monitoring requirements and operational issues encountered during the month of February 2022. The monthly certification form is included as Attachment A.

For the month of February, the system pumped an estimated 142,433 gallons of wastewater at an estimated average flow rate of 3.53 gallons per minute to the City of Havre de Grace Wastewater Treatment Plant during active system operation. The estimated average flow rate of 3.53 gallons per minute for the month of February satisfied both permit flow limitations (maximum of 30,000 gallons per day; 30-minute maximum of 1,000 gallons). Cytec complied with all permit conditions for flow for the month of February.

One pH meter is presently installed in-line with the effluent discharge pipe to measure pH continuously. pH results from the effluent wastewater complied with all permit conditions for pH during the month of February and no significant deviations were noted during active operation. Table 1 presents the daily flow volumes and weekly pH readings recorded for the month of February.

On January 20, the POTW notified Arcadis that there may be a potential leak at the POTW discharge point, prior to the stabilization system water entering the digester. The system remained shut down until Arcadis staff were onsite to inspect for any possible leaks on February 1. On February 1, Arcadis staff restarted the system and determined that there were no visible leaks at the POTW discharge point and replaced above ground corroded pipe connections at the discharge point at the POTW. On February 10, an above ground leak was noted at the POTW, and the system was shut down until the leaking parts were replaced by Arcadis staff on February 14. The system remained shut down due to freezing conditions and was restarted on February 23. Arcadis staff were onsite on February 23 to replace the faulty pH probe, and clean the EW-02 flow meter. The C-more panel was also upgraded to a new version, to increase the reliability of remote system access. On February 28, an E-stop alarm was received. This alarm may occur when the facility experiences a power fluctuation and requires a system reset. The alarms were cleared, and the system was restarted on March 3 by Arcadis staff.

The March Compliance Report will be submitted in April 2022. Daily flow and pH will continue to be measured continuously. If the system is shut down for a period of at least 24 hours, pH results will be monitored and reported for three consecutive days to maintain compliance with permit conditions.

If you have any questions or comments, please contact me at 443-252-1093.

Sincerely, Cytec Solvay Group

Jose Cortez HSE Manager

Enclosure

cc: Mr. Luis Pizarro, United States Environmental Protection Agency

Mr. Paul Nemanic, Cytec Solvay Group Ms. Tina Armstrong, Ph.D., Arcadis Ms. Shwetha Sridharan, Arcadis

Table 1 Flow and pH Monitoring for February 2022 Cytec Solvay Group Havre de Grace, Maryland

Date	Cumulative Total Gallons Extracted (MW-10D)	Cumulative Total Gallons Extracted (EW-01)	Cumulative Total Gallons Extracted (EW-02)	Combined Cumulative Total Gallons Extracted	Daily Total Gallons Extracted	pН
02/01/22	19,267,250	4,344,997	3,346,987	26,959,234	11,126	
02/02/22	19,274,089	4,346,298	3,349,973	26,970,360	14,632	
02/03/22	19,283,117	4,348,012	3,353,863	26,984,992	7,708	
02/04/22	19,287,896	4,348,916	3,355,888	26,992,700	14,475	5.28
02/05/22	19,296,890	4,350,620	3,359,665	27,007,175	5,949	
02/06/22	19,300,619	4,351,328	3,361,177	27,013,124	5,949	
02/07/22	19,304,347	4,352,036	3,362,689	27,019,072	5,949	
02/08/22	19,308,076	4,352,744	3,364,201	27,025,021	5,949	
02/09/22	19,311,804	4,353,452	3,365,713	27,030,969	13,812	
02/10/22	19,320,527	4,355,112	3,369,142	27,044,781	0	
02/11/22	19,320,527	4,355,112	3,369,142	27,044,781	0	5.51
02/12/22	19,320,527	4,355,112	3,369,142	27,044,781	0	
02/13/22	19,320,527	4,355,112	3,369,142	27,044,781	3,043	
02/14/22	19,322,455	4,355,478	3,369,891	27,047,824	0	
02/15/22	19,322,455	4,355,478	3,369,891	27,047,824	0	
02/16/22	19,322,455	4,355,478	3,369,891	27,047,824	0	
02/17/22	19,322,455	4,355,478	3,369,891	27,047,824	0	
02/18/22	19,322,455	4,355,478	3,369,891	27,047,824	0	
02/19/22	19,322,455	4,355,478	3,369,891	27,047,824	0	
02/20/22	19,322,455	4,355,478	3,369,891	27,047,824	0	
02/21/22	19,322,455	4,355,478	3,369,891	27,047,824	0	
02/22/22	19,322,455	4,355,478	3,369,891	27,047,824	0	
02/23/22	19,322,455	4,355,478	3,369,891	27,047,824	10,476	5.29
02/24/22	19,329,095	4,356,732	3,372,473	27,058,300	14,135	5.61
02/25/22	19,338,083	4,358,435	3,375,917	27,072,435	14,064	5.67
02/26/22	19,347,073	4,360,137	3,379,289	27,086,499	14,013	
02/27/22	19,356,064	4,361,837	3,382,611	27,100,512	1,155	
02/28/22	19,356,806	4,361,978	3,382,883	27,101,667	0	

Notes:

- 1. Operation of the expanded system began on January 16, 2015.
- 2. Totalizer readings are collected daily at 0800 at EW-01 and EW-02. In May 2018, the totalizer at MW-10D rolled over to a value greater than 10 million and the value was no longer presented on the system data tab. As a result, the totalizer reading was estimated between May 2018 and August 2019, based on the total flow in gallons recorded for the previous 24 hours. A system update was completed in August 2019 that reduced the totalizer reading for MW-10D by 10 million gallons.
- 3. Italics indicates estimated value for monthly and daily flow.

Table 2 Operational Issues for February 2022 Cytec Solvay Group Havre de Grace, Maryland

Date	Root Cause for Alarm	Response
2/1/2022	N/A	Arcadis staff were onsite at POTW to replace corroded piping into the digester.
2/10/2022	leak at POTW discharge point	An above ground leak was noted at POTW and the Cytec system was shut down until Arcadis staff could replace the leaking parts on 2/14. The system was restarted on 2/23.
2/23/2022	N/A	Arcadis staff were onsite to replace a faulty pH probe and to clean the EW-02 flow meter. Staff also replaced the C-more remote access panel with an upgraded model.
2/28/2022	E-Stop	An E-stop alarm was received and the system was automatically shut down. This alarm may occur when the facility experiences a power fluctuation and requires a system reset. The alarm was cleared by Arcadis staff on 3/3 and the system was restarted.

Attachment A

Attachment A

CYTEC SOLVAY GROUP PERIODIC COMPLIANCE REPORT

REPORTING MONTH/YEAR	February 2022	
TOTAL VOLUME DISCHARGED	142,433 Gallons	
supervision in accordance with a syste evaluate the information submitted. Bas or those persons directly responsible for my knowledge and belief, true, accurat	document and all attachments were preparem designed to assure that qualified personsed on my inquiry of the person or persons regathering the information, the information see, and complete. I am aware that there are the possibility of fine and imprisonment for	nnel properly gather and who manage the system, submitted is, to the best of e significant penalties for
 Date	Authorized Representative	



Cytec Solvay Group 1300 Revolution Street Havre de Grace, MD 21078 410.939.1910

April 5, 2022

Ms. Jennie Kilby Industrial Pretreatment Coordinator City of Havre de Grace Department of Public Works 711 Pennington Avenue Havre de Grace, Maryland 21078

Re: CYTEC SOLVAY GROUP AEROSPACE MATERIALS

Periodic Compliance Report – March 2022

Permit Number: CYT-2015-101

Dear Ms. Kilby:

CYTEC SOLVAY GROUP (Cytec) has prepared this Periodic Compliance Report for the month of March 2022 in accordance with the conditions set forth in Cytec's Industrial User Wastewater Discharge Permit (Permit No. CYT-2015-101). This Periodic Compliance Report presents the results of all monitoring requirements and operational issues encountered during the month of March 2022. The monthly certification form is included as Attachment A.

For the month of March, the system pumped an estimated 285,664 gallons of wastewater at an estimated average flow rate of 6.40 gallons per minute to the City of Havre de Grace Wastewater Treatment Plant during active system operation. The estimated average flow rate of 6.40 gallons per minute for the month of March satisfied both permit flow limitations (maximum of 30,000 gallons per day; 30-minute maximum of 1,000 gallons). Cytec complied with all permit conditions for flow for the month of March.

One pH meter is presently installed in-line with the effluent discharge pipe to measure pH continuously. pH results from the effluent wastewater complied with all permit conditions for pH during the month of March and no significant deviations were noted during active operation. Table 1 presents the daily flow volumes and weekly pH readings recorded for the month of March.

On March 2, an E-stop alarm was received. This alarm may occur when the facility experiences a power fluctuation and requires a system reset. The alarms were cleared, and the system was restarted on March 3 by Arcadis staff. On March 6, the system was turned off in advance of a rain event, to ensure that any ponding noted near the discharge point at the POTW system was due to rain, and not due to an underground pipe leak. The system was restarted on March 7, after confirmation with POTW staff. On March 9, an EW-02 pipe leak was received, and the system was automatically shut down. This alarm typically occurs during rain events when runoff infiltrates the EW-02 vault, triggering the alarm. Arcadis staff reset the alarm within 24-hours. On March 15, a P-300 Overload Fault alarm was received, and the system was automatically shut down. This alarm occurred as a result of the overload on the motor starter tripping (due to too much current). This alarm requires a manual reset onsite and will be inspected when Arcadis staff are onsite in April. This alarm affects the pumping at EW-02, and this well has been shut down since 3/15/22.

The April Compliance Report will be submitted in May 2022. Daily flow and pH will continue to be measured continuously. If the system is shut down for a period of at least 24 hours, pH results will be monitored and reported for three consecutive days to maintain compliance with permit conditions.

If you have any questions or comments, please contact me at 443-252-1093.

Sincerely, Cytec Solvay Group

Jose Cortez HSE Manager

Enclosure

cc: Mr. Luis Pizarro, United States Environmental Protection Agency

Mr. Paul Nemanic, Cytec Solvay Group Ms. Tina Armstrong, Ph.D., Arcadis Ms. Shwetha Sridharan, Arcadis

Table 1
Flow and pH Monitoring for March 2022
Cytec Solvay Group
Havre de Grace, Maryland

Date	Cumulative Total Gallons Extracted (MW-10D)	Cumulative Total Gallons Extracted (EW-01)	Cumulative Total Gallons Extracted (EW-02)	Combined Cumulative Total Gallons Extracted	Daily Total Gallons Extracted	pН
03/01/22	19,356,806	4,361,978	3,382,883	27,101,667	216	
03/02/22	19,356,806	4,361,978	3,383,099	27,101,883	0	
03/03/22	19,356,806	4,361,978	3,383,099	27,101,883	12,551	5.18
03/04/22	19,364,888	4,363,513	3,386,033	27,114,434	13,892	5.66
03/05/22	19,373,883	4,365,224	3,389,219	27,128,326	7,772	5.68
03/06/22	19,378,936	4,366,183	3,390,979	27,136,098	0	
03/07/22	19,378,936	4,366,183	3,390,979	27,136,098	81	5.33
03/08/22	19,378,989	4,366,193	3,390,997	27,136,179	9,482	5.29
03/09/22	19,385,172	4,367,367	3,393,122	27,145,661	74	5.67
03/10/22	19,385,221	4,367,376	3,393,138	27,145,735	13,647	
03/11/22	19,394,176	4,369,077	3,396,129	27,159,382	13,636	5.66
03/12/22	19,403,165	4,370,782	3,399,071	27,173,018	13,583	
03/13/22	19,412,157	4,372,494	3,401,950	27,186,601	13,487	
03/14/22	19,421,149	4,374,205	3,404,734	27,200,088	13,361	
03/15/22	19,430,138	4,375,910	3,407,401	27,213,449	3,098	
03/16/22	19,432,344	4,376,332	3,407,871	27,216,547	10,420	
03/17/22	19,441,106	4,377,990	3,407,871	27,226,967	10,687	
03/18/22	19,450,093	4,379,690	3,407,871	27,237,654	10,680	5.85
03/19/22	19,459,077	4,381,386	3,407,871	27,248,334	10,674	
03/20/22	19,468,058	4,383,079	3,407,871	27,259,008	10,691	
03/21/22	19,477,047	4,384,781	3,407,871	27,269,699	10,686	
03/22/22	19,486,032	4,386,482	3,407,871	27,280,385	10,690	
03/23/22	19,495,019	4,388,185	3,407,871	27,291,075	10,694	
03/24/22	19,504,009	4,389,889	3,407,871	27,301,769	10,698	
03/25/22	19,513,000	4,391,596	3,407,871	27,312,467	10,685	5.83
03/26/22	19,521,985	4,393,296	3,407,871	27,323,152	10,693	
03/27/22	19,530,973	4,395,001	3,407,871	27,333,845	10,701	
03/28/22	19,539,965	4,396,710	3,407,871	27,344,546	10,704	
03/29/22	19,548,958	4,398,421	3,407,871	27,355,250	10,704	
03/30/22	19,557,950	4,400,133	3,407,871	27,365,954	10,700	
03/31/22	19,566,939	4,401,844	3,407,871	27,376,654	10,677	

Notes:

- 1. Operation of the expanded system began on January 16, 2015.
- 2. Totalizer readings are collected daily at 0800 at EW-01 and EW-02. In May 2018, the totalizer at MW-10D rolled over to a value greater than 10 million and the value was no longer presented on the system data tab. As a result, the totalizer reading was estimated between May 2018 and August 2019, based on the total flow in gallons recorded for the previous 24 hours. A system update was completed in August 2019 that reduced the totalizer reading for MW-10D by 10 million gallons.

Table 2 Operational Issues for March 2022 Cytec Solvay Group Havre de Grace, Maryland

Date	Root Cause for Alarm	Response
3/2/2022	E-Stop	An E-stop alarm was received and the system was automatically shut down. This alarm may occur when the facility experiences a power fluctuation and requires a system reset. The alarm was cleared by Arcadis staff on 3/3 and the system was restarted.
3/6/2022	N/A	The system was turned off in advance of a rain event, to make sure ponding noted at the POTW system was due to rain and not due to a pipe leak. The system was restarted on 3/7.
3/9/2022	EW-02 Pipe Leak	An EW-02 pipe leak alarm was received and the system was automatically shut down. This alarm typically occurs during rain events when runoff infiltrates the EW-02 vault, triggering the alarm. Arcadis staff reset the alarms within 24 hours.
3/15/2022	P-300 Overload Fault	An overload fault alarm was received and the system was automatically shut down. This alarm occurred as a result of the overload on the motor starter tripping (due to too much current going through). This alarm requires a manual reset onsite and will be inspected when Arcadis staff are onsite in April. This alarm affects the pumping at EW-02; that well has been shut down since 3/15/22.

Attachment A

Attachment A

CYTEC SOLVAY GROUP PERIODIC COMPLIANCE REPORT

REPORTING MONTH/YEAR	March 2022	
TOTAL VOLUME DISCHARGED	285,664 Gallons	
supervision in accordance with a syst evaluate the information submitted. Ba or those persons directly responsible fo my knowledge and belief, true, accura	document and all attachments were preparem designed to assure that qualified personsed on my inquiry of the person or persons or gathering the information, the information ste, and complete. I am aware that there are the possibility of fine and imprisonment for	nnel properly gather and who manage the system, submitted is, to the best of e significant penalties for
Date	Authorized Representative	



Cytec Solvay Group 1300 Revolution Street Havre de Grace, MD 21078 410.939.1910

May 11, 2022

Ms. Jennie Kilby Industrial Pretreatment Coordinator City of Havre de Grace Department of Public Works 711 Pennington Avenue Havre de Grace, Maryland 21078

Re: CYTEC SOLVAY GROUP AEROSPACE MATERIALS

Periodic Compliance Report – April 2022

Permit Number: CYT-2015-101

Dear Ms. Kilby:

CYTEC SOLVAY GROUP (Cytec) has prepared this Periodic Compliance Report for the month of April 2022 in accordance with the conditions set forth in Cytec's Industrial User Wastewater Discharge Permit (Permit No. CYT-2015-101). This Periodic Compliance Report presents the results of all monitoring requirements and operational issues encountered during the month of April 2022. The monthly certification form is included as Attachment A.

For the month of April, the system pumped an estimated 247,191 gallons of wastewater at an estimated average flow rate of 5.72 gallons per minute to the City of Havre de Grace Wastewater Treatment Plant during active system operation. The estimated average flow rate of 5.72 gallons per minute for the month of April satisfied both permit flow limitations (maximum of 30,000 gallons per day; 30-minute maximum of 1,000 gallons).

One pH meter is presently installed in-line with the effluent discharge pipe to measure pH continuously. pH results from the effluent wastewater complied with all permit conditions for pH during the month of April and no significant deviations were noted during active operation. Table 1 presents the daily flow volumes and weekly pH readings recorded for the month of April.

On April 11, an MW-10D vault sump high level alarm was received and the system was automatically shut down. The alarm is usually indicative of a leak in the system and the system was left off until it could be inspected by Arcadis staff on April 12. Arcadis was onsite between April 12 and April 15 to conduct routine O&M, including pipe jetting and well rehab. All existing alarms were cleared and the system was restarted, no leaks were noted. As noted in the March 2022 report, the pump motor at EW-02 is faulty and is currently pending replacement and EW-02 has been shut down since March 15, 2022. Arcadis is currently reviewing options to replace this motor, dependent on when parts can be shipped from the manufacturer. On April 28, there was a power outage at the site and the system shut down. The system was restarted by on-site personnel on May 3, 2022.

The May Compliance Report will be submitted in June 2022. Daily flow and pH will continue to be measured continuously. If the system is shut down for a period of at least 24 hours, pH results will be monitored and reported for three consecutive days to maintain compliance with permit conditions.

If you have any questions or comments, please contact me at 443-252-1093.

Sincerely, Cytec Solvay Group

Jose Cortez HSE Manager

Enclosure

cc: Mr. Luis Pizarro, United States Environmental Protection Agency

Mr. Paul Nemanic, Cytec Solvay Group

Mr. Joshua Wilson, Arcadis Ms. Shwetha Sridharan, Arcadis

Table 1 Flow and pH Monitoring for April 2022 Cytec Solvay Group Havre de Grace, Maryland

Date	Cumulative Total Gallons Extracted (MW-10D)	Cumulative Total Gallons Extracted (EW-01)	Cumulative Total Gallons Extracted (EW-02)	Combined Cumulative Total Gallons Extracted	Daily Total Gallons Extracted	pН
04/01/22	19,575,921	4,403,539	3,407,871	27,387,331	10,693	5.83
04/02/22	19,584,909	4,405,244	3,407,871	27,398,024	10,692	
04/03/22	19,593,897	4,406,948	3,407,871	27,408,716	10,692	
04/04/22	19,602,884	4,408,653	3,407,871	27,419,408	10,691	
04/05/22	19,611,871	4,410,357	3,407,871	27,430,099	10,682	
04/06/22	19,620,856	4,412,054	3,407,871	27,440,781	10,682	
04/07/22	19,629,841	4,413,751	3,407,871	27,451,463	10,693	
04/08/22	19,638,830	4,415,455	3,407,871	27,462,156	10,686	5.83
04/09/22	19,647,815	4,417,156	3,407,871	27,472,842	10,690	
04/10/22	19,656,802	4,418,859	3,407,871	27,483,532	10,695	
04/11/22	19,665,792	4,420,564	3,407,871	27,494,227	2,927	
04/12/22	19,668,255	4,421,028	3,407,871	27,497,154	162	
04/13/22	19,668,374	4,421,049	3,407,893	27,497,316	0	
04/14/22	19,668,374	4,421,049	3,407,893	27,497,316	0	
04/15/22	19,668,374	4,421,049	3,407,893	27,497,316	8,824	5.90
04/16/22	19,675,560	4,422,414	3,408,166	27,506,140	10,689	5.87
04/17/22	19,684,546	4,424,117	3,408,166	27,516,829	10,705	5.87
04/18/22	19,693,538	4,425,830	3,408,166	27,527,534	10,710	
04/19/22	19,702,534	4,427,544	3,408,166	27,538,244	10,708	
04/20/22	19,711,528	4,429,258	3,408,166	27,548,952	10,699	
04/21/22	19,720,518	4,430,967	3,408,166	27,559,651	10,698	
04/22/22	19,729,506	4,432,677	3,408,166	27,570,349	10,693	5.74
04/23/22	19,738,492	4,434,384	3,408,166	27,581,042	10,693	
04/24/22	19,747,478	4,436,090	3,408,166	27,591,734	10,691	
04/25/22	19,756,463	4,437,796	3,408,166	27,602,425	10,696	
04/26/22	19,765,449	4,439,506	3,408,166	27,613,121	10,696	
04/27/22	19,774,437	4,441,214	3,408,166	27,623,817	10,705	
04/28/22	19,783,428	4,442,928	3,408,166	27,634,522	0	_
04/29/22	19,783,428	4,442,928	3,408,166	27,634,522	0	5.60
04/30/22	19,783,428	4,442,928	3,408,166	27,634,522	0	

Notes:

- 1. Operation of the expanded system began on January 16, 2015.
- 2. Totalizer readings are collected daily at 0800 at EW-01 and EW-02. In May 2018, the totalizer at MW-10D rolled over to a value greater than 10 million and the value was no longer presented on the system data tab. As a result, the totalizer reading was estimated between May 2018 and August 2019, based on the total flow in gallons recorded for the previous 24 hours. A system update was completed in August 2019 that reduced the totalizer reading for MW-10D by 10 million gallons.
- 3. Italics indicates estimated value for monthly and daily flow.

Table 2 Operational Issues for April 2022 Cytec Solvay Group Havre de Grace, Maryland

Date	Root Cause for Alarm	Response
4/11/2022	MW-10D Vault Sump High Level	An MW-10D vault sump high level alarm was received and the system was automatically shut down. This alarm is usually indicative of a leak in the system and the system was left off until it could be inspected.
4/12/2022 - 4/15/2022	O&M	Arcadis was onsite to conduct routine yearly pipe jetting, well rehab, and O&M event. The P-300 Overload alarm remains active as the motor at EW-02 has failed and needs to be replaced. Arcadis is currently considering replacement motors for EW-02. All other alarms were cleared and the system was restarted, though EW-02 was left off. No leaks were noted.
4/28/2022	N/A	A power outage at the plant turned the system off. The modem was also turned off and the system was restarted on 5/3/22 by on-site personnel.

Attachment A

Attachment A

CYTEC SOLVAY GROUP PERIODIC COMPLIANCE REPORT

REPORTING MONTH/YEAR	April 2022	
TOTAL VOLUME DISCHARGED	247,191 Gallons	
supervision in accordance with a syste evaluate the information submitted. Bas or those persons directly responsible for my knowledge and belief, true, accurat	document and all attachments were preparem designed to assure that qualified person sed on my inquiry of the person or persons regathering the information, the information see, and complete. I am aware that there are the possibility of fine and imprisonment for	onnel properly gather and who manage the system, submitted is, to the best of re significant penalties for
 Date	Authorized Representative	



Cytec Solvay Group 1300 Revolution Street Havre de Grace, MD 21078 410.939.1910

June 14, 2022

Mr. Ken Montgomery Industrial Pretreatment Coordinator City of Havre de Grace Department of Public Works 711 Pennington Avenue Havre de Grace, Maryland 21078

Re: CYTEC SOLVAY GROUP AEROSPACE MATERIALS

Periodic Compliance Report – May 2022

Permit Number: CYT-2015-101

Dear Mr. Montgomery:

CYTEC SOLVAY GROUP (Cytec) has prepared this Periodic Compliance Report for the month of May 2022 in accordance with the conditions set forth in Cytec's Industrial User Wastewater Discharge Permit (Permit No. CYT-2015-101). This Periodic Compliance Report presents the results of all monitoring requirements and operational issues encountered during the month of May 2022. The monthly certification form is included as Attachment A.

For the month of May, the system pumped an estimated 277,962 gallons of wastewater at an estimated average flow rate of 6.23 gallons per minute to the City of Havre de Grace Wastewater Treatment Plant during active system operation. The estimated average flow rate of 6.23 gallons per minute for the month of May satisfied both permit flow limitations (maximum of 30,000 gallons per day; 30-minute maximum of 1,000 gallons).

One pH meter is presently installed in-line with the effluent discharge pipe to measure pH continuously. pH results from the effluent wastewater complied with all permit conditions for pH during the month of May and no significant deviations were noted during active operation. Table 1 presents the daily flow volumes and weekly pH readings recorded for the month of May.

As noted in the March 2022 report, the pump motor at EW-02 is faulty and is currently pending replacement and EW-02 has been shut down since March 15, 2022. Arcadis is currently reviewing options to replace this motor, dependent on when parts can be shipped from the manufacturer. One E-stop (May 3, 2022) and two drive fault alarms (May 5 and May 24, 2022) were received which automatically shut down the system. These alarms may occur when the facility experiences a power fluctuation. All alarms were cleared by onsite personnel within 24 hours. On May 6, 2022, an EW-01 pipe leak alarm was received, and the system was automatically shut down. The alarm was over-ridden and the system was restarted within 24 hours. This alarm currently remains over-ridden and continues to be triggered, though this could be due to standing water in the EW-01 vault; this is a common alarm and does not necessarily indicate a leaking pipe. Arcadis staff will inspect the vault during the next site visit. Alarms are summarized on Table 2.

The June Compliance Report will be submitted in July 2022. Daily flow and pH will continue to be

measured continuously. If the system is shut down for a period of at least 24 hours, pH results will be monitored and reported for three consecutive days to maintain compliance with permit conditions.

The first semi-annual effluent grab sample for 2022 was collected from the point of discharge at the POTW on May 10, 2022. The effluent grab sample was analyzed for Priority Pollutant volatile organic compounds, semi-volatile organic compounds, metals, and cyanide. Analytical results for the effluent groundwater samples for metals and cyanide are compared to the effluent limitations specified in Cytec's Industrial User Wastewater Discharge Permit (Permit No. CYT-2015-101). Table 3 presents the analytical results required by the Permit. As summarized in Table 3 below, no exceedances of the effluent limitations were observed. The analytical laboratory report is presented as Attachment B, including volatile organic compound and semi-volatile organic compound results.

Table 3. Analytical Data Summary

Parameter	Effluent Limitations (µg/l)	May 2022 POTW Discharge (μg/l)
Total Arsenic	4,060	6.3 J
Total Cadmium	90	ND
Total Chromium	390	ND
Total Copper	80	ND
Total Lead	650	ND
Total Nickel	780	5.7 J
Total Silver	50	ND
Total Zinc	9,300	6.0 J
Total Mercury	0.3	ND
Total Cyanide	180	0.0091 J

If you have any questions or comments, please contact me at 443-252-1093.

Sincerely, Cytec Solvay Group

Jose Cortez HSE Manager

Enclosure

Mr. Luis Pizarro, United States Environmental Protection Agency Mr. Paul Nemanic, Cytec Solvay Group cc:

Mr. Joshua Wilson, Arcadis Ms. Shwetha Sridharan, Arcadis

Table 1
Flow and pH Monitoring for May 2022
Cytec Solvay Group
Havre de Grace, Maryland

Date	Cumulative Total Gallons Extracted (MW-10D)	Cumulative Total Gallons Extracted (EW-01)	Cumulative Total Gallons Extracted (EW-02)	Combined Cumulative Total Gallons Extracted	Daily Total Gallons Extracted	рН
05/01/22	19,783,428	4,442,928	3,408,166	27,634,522	0	
05/02/22	19,783,428	4,442,928	3,408,166	27,634,522	1,635	
05/03/22	19,784,802	4,443,189	3,408,166	27,636,157	5,574	
05/04/22	19,789,486	4,444,079	3,408,166	27,641,731	3,716	
05/05/22	19,792,608	4,444,672	3,408,166	27,645,446	7,432	
05/06/22	19,798,853	4,445,859	3,408,166	27,652,878	10,685	5.77
05/07/22	19,807,828	4,447,569	3,408,166	27,663,563	10,711	
05/08/22	19,816,825	4,449,283	3,408,166	27,674,274	10,705	
05/09/22	19,825,817	4,450,996	3,408,166	27,684,979	10,694	
05/10/22	19,834,804	4,452,703	3,408,166	27,695,673	10,692	
05/11/22	19,843,788	4,454,411	3,408,166	27,706,365	10,694	
05/12/22	19,852,771	4,456,122	3,408,166	27,717,059	10,688	
05/13/22	19,861,752	4,457,829	3,408,166	27,727,747	10,689	5.76
05/14/22	19,870,732	4,459,538	3,408,166	27,738,436	10,696	
05/15/22	19,879,714	4,461,252	3,408,166	27,749,132	10,686	
05/16/22	19,888,694	4,462,958	3,408,166	27,759,818	10,693	
05/17/22	19,897,677	4,464,668	3,408,166	27,770,511	10,685	
05/18/22	19,906,657	4,466,373	3,408,166	27,781,196	10,692	
05/19/22	19,915,640	4,468,082	3,408,166	27,791,888	10,688	
05/20/22	19,924,622	4,469,788	3,408,166	27,802,576	10,680	5.77
05/21/22	19,933,599	4,471,491	3,408,166	27,813,256	10,676	
05/22/22	19,942,573	4,473,193	3,408,166	27,823,932	6,908	
05/23/22	19,948,378	4,474,296	3,408,166	27,830,840	3,454	
05/24/22	19,951,280	4,474,848	3,408,166	27,834,293	3,454	
05/25/22	19,954,182	4,475,399	3,408,166	27,837,747	10,686	
05/26/22	19,963,162	4,477,105	3,408,166	27,848,433	10,686	
05/27/22	19,972,142	4,478,811	3,408,166	27,859,119	10,681	5.75
05/28/22	19,981,122	4,480,512	3,408,166	27,869,800	10,680	
05/29/22	19,990,101	4,482,213	3,408,166	27,880,480	10,676	
05/30/22	19,999,077	4,483,913	3,408,166	27,891,156	10,668	
05/31/22	20,008,050	4,485,608	3,408,166	27,901,824	10,660	

Notes:

- 1. Operation of the expanded system began on January 16, 2015.
- 2. Totalizer readings are collected daily at 0800 at EW-01 and EW-02. In May 2018, the totalizer at MW-10D rolled over to a value greater than 10 million and the value was no longer presented on the system data tab. As a result, the totalizer reading was estimated between May 2018 and August 2019, based on the total flow in gallons recorded for the previous 24 hours. A system update was completed in August 2019 that reduced the totalizer reading for MW-10D by 10 million gallons.
- 3. Italics indicates estimated value for monthly and daily flow.

Table 2 Operational Issues for May 2022 Cytec Solvay Group Havre de Grace, Maryland

Date	Root Cause for Alarm	Response
5/3/2022	E-Stop	An E-stop alarm was received and the system was automatically shut down. This alarm may occur when the facility experiences a power fluctuation and requires a system reset. The alarm was cleared by onsite staff within 24 hours and the system was restarted.
5/5/2022 & 5/24/2022	Drive Fault Alarms	Drive fault alarms were received and the system was automatically shut down. This alarm may occur when the facility experiences a power fluctuation and requires a system reset. The alarm was cleared by onsite staff within 24 hours and the system was restarted.
5/6/2022	EW-01 Pipe Leak	An EW-01 pipe leak alarm was received and the system was automatically shut down. This alarm typically occurs during rain events when runoff infiltrates the EW-01 vault, triggering the alarm. The alarm was disabled and the system restarted withing 24 hours. The alarm remains active, Arcadis staff will inspect the vault for standing water during the next site visit.

Attachment A

Attachment A

CYTEC SOLVAY GROUP PERIODIC COMPLIANCE REPORT

REPORTING MONTH/YEAR	May 2022
TOTAL VOLUME DISCHARGED	277,962 Gallons
supervision in accordance with a syste evaluate the information submitted. Bas or those persons directly responsible for my knowledge and belief, true, accurate	ocument and all attachments were prepared under my direction or m designed to assure that qualified personnel properly gather and sed on my inquiry of the person or persons who manage the system, gathering the information, the information submitted is, to the best of e, and complete. I am aware that there are significant penalties for ne possibility of fine and imprisonment for knowing violations."
Date	Authorized Representative

Attachment B

ANALYTICAL REPORT

Eurofins Pittsburgh 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 Tel: (412)963-7058

Laboratory Job ID: 180-137972-1

Client Project/Site: Cytec Havre de Grace MD

For:

ARCADIS U.S., Inc. 7550 Teague Road Suite 210 Hanover, Maryland 21076

Attn: Ms. Shwetha Sridharan

Josh

Authorized for release by: 6/2/2022 12:10:34 PM

Jill Colussy, Project Manager I

(412)963-2444

Jill.Colussy@et.eurofinsus.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

PA Lab ID: 02-00416



Client: ARCADIS U.S., Inc. Project/Site: Cytec Havre de Grace MD Laboratory Job ID: 180-137972-1

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Case Narrative

Client: ARCADIS U.S., Inc.

Job ID: 180-137972-1 Project/Site: Cytec Havre de Grace MD

Job ID: 180-137972-1

Laboratory: Eurofins Pittsburgh

Narrative

Job Narrative 180-137972-1

Receipt

The samples were received on 5/11/2022 9:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.8° C.

GC/MS VOA

Due to the concentration of target compounds detected, samples EW-1 (051022) (180-137972-1), EFFLUENT (051022) (180-137972-3) and POTW (051022) (180-137972-4), were analyzed at a dilution. Elevated reporting limits (RLs) are provided.

The laboratory control sample (LCS) for batch 180-398499 recovered outside control limits for 1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane, Acrylonitrile and Bromoform. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

GC/MS Semi VOA

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 180-137972-1

Project/Site: Cytec Havre de Grace MD

Qualifiers

GC/MS VOA

Qualifier Qualifier Description

*+ LCS and/or LCSD is outside acceptance limits, high biased.

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier Qualifier Description

F1 MS and/or MSD recovery exceeds control limits.

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier Qualifier Description

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier Qualifier Description

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Eisted under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
CFU Colony Forming Unit
CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
MPN Most Probable Number
MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive
QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

Eurofins Pittsburgh

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Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 180-137972-1

Project/Site: Cytec Havre de Grace MD

Laboratory: Eurofins Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-22
California	State	2891	04-30-22 *
Connecticut	State	PH-0688	09-30-22
Florida	NELAP	E871008	06-30-22
Georgia	State	PA 02-00416	04-30-23
Illinois	NELAP	004375	06-30-22
Kansas	NELAP	E-10350	03-31-23
Kentucky (UST)	State	162013	04-30-22 *
Kentucky (WW)	State	KY98043	12-31-22
Louisiana	NELAP	04041	06-30-22
Maine	State	PA00164	03-06-24
Minnesota	NELAP	042-999-482	12-31-22
Nevada	State	PA00164	08-31-22
New Hampshire	NELAP	2030	04-04-23
New Jersey	NELAP	PA005	06-30-23
New York	NELAP	11182	04-01-23
North Carolina (WW/SW)	State	434	12-31-22
North Dakota	State	R-227	04-30-22 *
Oregon	NELAP	PA-2151	02-07-23
Pennsylvania	NELAP	02-00416	04-30-23
Rhode Island	State	LAO00362	12-31-21 *
South Carolina	State	89014	06-30-22
Texas	NELAP	T104704528	03-31-23
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-22 *
Virginia	NELAP	10043	09-14-22
West Virginia DEP	State	142	01-31-23
Wisconsin	State	998027800	08-31-22

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 $^{{}^{\}star}\operatorname{Accreditation/Certification\ renewal\ pending\ -\ accreditation/certification\ considered\ valid}.$

Eurofins Pittsburgh

Sample Summary

Client: ARCADIS U.S., Inc. Job ID: 180-137972-1

Client: ARCADIS U.S., Inc. Project/Site: Cytec Havre de Grace MD

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-137972-1	EW-1 (051022)	Water	05/10/22 10:30	05/11/22 09:00
180-137972-2	MW-10D (051022)	Water	05/10/22 10:35	05/11/22 09:00
180-137972-3	EFFLUENT (051022)	Water	05/10/22 10:40	05/11/22 09:00
180-137972-4	POTW (051022)	Water	05/10/22 11:00	05/11/22 09:00
180-137972-5	TRIP BLANK	Water	05/10/22 00:00	05/11/22 09:00

Method Summary

Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Method **Method Description** Protocol Laboratory TAL PIT EPA 624.1 Volatile Organic Compounds (GC/MS) 40CFR136A 40 CFR 761 EPA 625.1 Semivolatile Organic Compounds (GC/MS) **TAL PIT** EPA 200.7 Rev 4 Metals (ICP) **EPA TAL PIT** EPA 245.1 Rev. Mercury (CVAA) EPA TAL PIT SM 4500CN E Total Cyanide SM TAL PIT 200.7 Preparation, Total Recoverable Metals EPA TAL PIT Preparation, Mercury 245.1 EPA TAL PIT 625 Liquid-Liquid Extraction 40CFR136A TAL PIT SM 4500 CN C Cyanide, Distillation SM **TAL PIT**

Protocol References:

40 CFR 761 = Toxic Substances Control Act (TSCA)

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

TAL PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Job ID: 180-137972-1

Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Client Sample ID: EW-1 (051022)

Date Collected: 05/10/22 10:30 Date Received: 05/11/22 09:00 Lab Sample ID: 180-137972-1

Matrix: Water

Job ID: 180-137972-1

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 624.1		50	5 mL	5 mL	398499	05/12/22 14:57	SW1	TAL PIT
	Inetrumen	TID: CHHP6								

Client Sample ID: MW-10D (051022)

Date Collected: 05/10/22 10:35 Date Received: 05/11/22 09:00 Lab Sample ID: 180-137972-2

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 624.1		1	5 mL	5 mL	398499	05/12/22 15:23	SW1	TAL PIT
	Instrumen	t ID: CHHP6								

Client Sample ID: EFFLUENT (051022)

Date Collected: 05/10/22 10:40

Date Received: 05/11/22 09:00

Lab Sample ID: 180-137972-3

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 624.1		5	5 mL	5 mL	398499	05/12/22 13:14	SW1	TAL PIT
	Instrumer	it ID: CHHP6								

Client Sample ID: POTW (051022)

Date Collected: 05/10/22 11:00

Date Received: 05/11/22 09:00

Lab Sample ID: 180-137972-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumer	EPA 624.1 at ID: CHHP6		5	5 mL	5 mL	398499	05/12/22 14:06	SW1	TAL PIT
Total/NA Total/NA	Prep Analysis Instrumer	625 EPA 625.1 at ID: CH733		1	240 mL 1 mL	250 uL 1 mL	399113 399580	05/17/22 14:55 05/21/22 16:11		TAL PIT
Total Recoverable Total Recoverable	Prep Analysis Instrumer	200.7 EPA 200.7 Rev 4 at ID: C		1	25 mL	25 mL	399223 399442	05/18/22 13:03 05/19/22 23:55		TAL PIT
Total/NA Total/NA	Prep Analysis Instrumer	245.1 EPA 245.1 Rev. at ID: HGY		1	50 mL	50 mL	400485 400599	06/01/22 07:25 06/01/22 18:43		TAL PIT
Total/NA Total/NA	Prep Analysis Instrumer	SM 4500 CN C SM 4500CN E at ID: SEAL1		1	6 mL	6 mL	398646 399126	05/17/22 08:00 05/17/22 13:50		TAL PIT

Client Sample ID: TRIP BLANK

Date Collected: 05/10/22 00:00

Date Received: 05/11/22 09:00

Lab Sample ID: 180-137972-5

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 624.1		1	5 mL	5 mL	398499	05/12/22 13:40	SW1	TAL PIT
	Instrumer	t ID: CHHP6								

Eurofins Pittsburgh

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6/2/2022

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Lab Chronicle

Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Laboratory References:

TAL PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: TAL PIT

Batch Type: Prep

BJT = Bill Trout

CMR = Carl Reagle

NAF = Nicholas Frankos

RJR = Ron Rosenbaum

Batch Type: Analysis

CMR = Carl Reagle

RJG = Rob Good

RJR = Ron Rosenbaum

SW1 = Sunan Wang-un

VVP = Vincent Piccolino

Job ID: 180-137972-1

Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Client Sample ID: EW-1 (051022)

Date Collected: 05/10/22 10:30 Date Received: 05/11/22 09:00 Lab Sample ID: 180-137972-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	MD		50	30	ug/L			05/12/22 14:57	50
1,1,2,2-Tetrachloroethane	ND	*+	50	30	ug/L			05/12/22 14:57	50
1,1,2-Trichloroethane	ND	*+	50	23	ug/L			05/12/22 14:57	50
1,1-Dichloroethane	ND		50	15	ug/L			05/12/22 14:57	50
1,1-Dichloroethene	ND		50	28	ug/L			05/12/22 14:57	50
1,2-Dichloroethane	670		50	29	ug/L			05/12/22 14:57	50
1,2-Dichloropropane	ND		50	33	ug/L			05/12/22 14:57	50
1,2-Dichlorobenzene	ND		50	18	ug/L			05/12/22 14:57	50
1,3-Dichlorobenzene	ND		50	25	ug/L			05/12/22 14:57	50
1,4-Dichlorobenzene	ND		50	27	ug/L			05/12/22 14:57	50
2-Chloroethyl vinyl ether	ND		100	86	ug/L			05/12/22 14:57	50
Acrolein	ND		1000	800	ug/L			05/12/22 14:57	50
Acrylonitrile	ND	*+	1000	390	ug/L			05/12/22 14:57	50
Benzene	ND		50	30	ug/L			05/12/22 14:57	50
Bromoform	ND	*+	50	49	ug/L			05/12/22 14:57	50
Bromomethane	ND		50	44	ug/L			05/12/22 14:57	50
Carbon tetrachloride	ND		50	44	ug/L			05/12/22 14:57	50
Chlorobenzene	ND		50	25	ug/L			05/12/22 14:57	50
Chloroform	ND		50	30	ug/L			05/12/22 14:57	50
Chloromethane	ND		50	45	ug/L			05/12/22 14:57	50
cis-1,3-Dichloropropene	ND		50	30	ug/L			05/12/22 14:57	50
Ethylbenzene	ND		50	25	ug/L			05/12/22 14:57	50
Methylene Chloride	ND		50	44	ug/L			05/12/22 14:57	50
Tetrachloroethene	ND		50	23	ug/L			05/12/22 14:57	50
Toluene	ND		50	23	ug/L			05/12/22 14:57	50
trans-1,2-Dichloroethene	ND		50	34	ug/L			05/12/22 14:57	50
trans-1,3-Dichloropropene	ND		50	29	ug/L			05/12/22 14:57	50
Trichloroethene	ND		50	34	ug/L			05/12/22 14:57	50
Vinyl chloride	ND		50	20	ug/L			05/12/22 14:57	50
Dibromochloromethane	ND		50	42	ug/L			05/12/22 14:57	50
Bromodichloromethane	ND		50	32	ug/L			05/12/22 14:57	50
Chloroethane	ND		50	45	ug/L			05/12/22 14:57	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	121		28 - 163			·		05/12/22 14:57	50
4-Bromofluorobenzene (Surr)	99		41 - 122					05/12/22 14:57	50
Toluene-d8 (Surr)	87		53 - 125					05/12/22 14:57	50
Dibromofluoromethane (Surr)	103		59 - 168					05/12/22 14:57	50

Client Sample ID: MW-10D (051022)

Date Collected: 05/10/22 10:35

Date Received: 05/11/22 09:00

Lab Sample ID: 180-137972-2

Matrix: Water

Method: EPA 624.1 - Volatile Analyte	•	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L	— <u> </u>		05/12/22 15:23	1
1,1,2,2-Tetrachloroethane	ND	*+	1.0	0.60	ug/L			05/12/22 15:23	1
1,1,2-Trichloroethane	ND	*+	1.0	0.45	ug/L			05/12/22 15:23	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			05/12/22 15:23	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			05/12/22 15:23	1

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Job ID: 180-137972-1

Project/Site: Cytec Havre de Grace MD

Client Sample ID: MW-10D (051022)

Date Collected: 05/10/22 10:35 Date Received: 05/11/22 09:00

Client: ARCADIS U.S., Inc.

Lab Sample ID: 180-137972-2

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		1.0	0.57	ug/L			05/12/22 15:23	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			05/12/22 15:23	1
1,2-Dichlorobenzene	ND		1.0	0.36	ug/L			05/12/22 15:23	1
1,3-Dichlorobenzene	ND		1.0	0.50	ug/L			05/12/22 15:23	1
1,4-Dichlorobenzene	ND		1.0	0.54	ug/L			05/12/22 15:23	1
2-Chloroethyl vinyl ether	ND		2.0	1.7	ug/L			05/12/22 15:23	1
Acrolein	ND		20	16	ug/L			05/12/22 15:23	1
Acrylonitrile	ND	*+	20	7.8	ug/L			05/12/22 15:23	1
Benzene	ND		1.0	0.60	ug/L			05/12/22 15:23	1
Bromoform	ND	*+	1.0	0.98	ug/L			05/12/22 15:23	1
Bromomethane	ND		1.0	0.89	ug/L			05/12/22 15:23	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			05/12/22 15:23	1
Chlorobenzene	ND		1.0	0.50	ug/L			05/12/22 15:23	1
Chloroform	ND		1.0	0.60	ug/L			05/12/22 15:23	1
Chloromethane	ND		1.0	0.90	ug/L			05/12/22 15:23	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			05/12/22 15:23	1
Ethylbenzene	ND		1.0	0.51	ug/L			05/12/22 15:23	1
Methylene Chloride	ND		1.0	0.89	ug/L			05/12/22 15:23	1
Tetrachloroethene	ND		1.0	0.47	ug/L			05/12/22 15:23	1
Toluene	ND		1.0	0.46	ug/L			05/12/22 15:23	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			05/12/22 15:23	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			05/12/22 15:23	1
Trichloroethene	ND		1.0	0.69	ug/L			05/12/22 15:23	1
Vinyl chloride	ND		1.0	0.40	ug/L			05/12/22 15:23	1
Dibromochloromethane	ND		1.0	0.84	ug/L			05/12/22 15:23	1
Bromodichloromethane	ND		1.0	0.64	ug/L			05/12/22 15:23	1
Chloroethane	ND		1.0	0.90	ug/L			05/12/22 15:23	1

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	120	28 - 163		05/12/22 15:23	1
4-Bromofluorobenzene (Surr)	98	41 - 122		05/12/22 15:23	1
Toluene-d8 (Surr)	89	53 - 125		05/12/22 15:23	1
Dibromofluoromethane (Surr)	105	59 ₋ 168		05/12/22 15:23	1

Client Sample ID: EFFLUENT (051022)

Date Collected: 05/10/22 10:40 Date Received: 05/11/22 09:00 Lab Sample ID: 180-137972-3

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	3.0	ug/L			05/12/22 13:14	5
1,1,2,2-Tetrachloroethane	ND	*+	5.0	3.0	ug/L			05/12/22 13:14	5
1,1,2-Trichloroethane	ND	*+	5.0	2.3	ug/L			05/12/22 13:14	5
1,1-Dichloroethane	ND		5.0	1.5	ug/L			05/12/22 13:14	5
1,1-Dichloroethene	ND		5.0	2.8	ug/L			05/12/22 13:14	5
1,2-Dichloroethane	140		5.0	2.9	ug/L			05/12/22 13:14	5
1,2-Dichloropropane	ND		5.0	3.3	ug/L			05/12/22 13:14	5
1,2-Dichlorobenzene	ND		5.0	1.8	ug/L			05/12/22 13:14	5
1,3-Dichlorobenzene	ND		5.0	2.5	ug/L			05/12/22 13:14	5
1,4-Dichlorobenzene	ND		5.0	2.7	ug/L			05/12/22 13:14	5

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Client: ARCADIS U.S., Inc. Job ID: 180-137972-1 Project/Site: Cytec Havre de Grace MD

Client Sample ID: EFFLUENT (051022)

Lab Sample ID: 180-137972-3 **Matrix: Water**

Date Collected: 05/10/22 10:40 Date Received: 05/11/22 09:00

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result C	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloroethyl vinyl ether	ND ND		10	8.6	ug/L			05/12/22 13:14	5
Acrolein	ND		100	80	ug/L			05/12/22 13:14	5
Acrylonitrile	ND *-	+	100	39	ug/L			05/12/22 13:14	5
Benzene	ND		5.0	3.0	ug/L			05/12/22 13:14	5
Bromoform	ND *-	+	5.0	4.9	ug/L			05/12/22 13:14	5
Bromomethane	ND		5.0	4.4	ug/L			05/12/22 13:14	5
Carbon tetrachloride	ND		5.0	4.4	ug/L			05/12/22 13:14	5
Chlorobenzene	ND		5.0	2.5	ug/L			05/12/22 13:14	5
Chloroform	ND		5.0	3.0	ug/L			05/12/22 13:14	5
Chloromethane	ND		5.0	4.5	ug/L			05/12/22 13:14	5
cis-1,3-Dichloropropene	ND		5.0	3.0	ug/L			05/12/22 13:14	5
Ethylbenzene	ND		5.0	2.5	ug/L			05/12/22 13:14	5
Methylene Chloride	ND		5.0	4.4	ug/L			05/12/22 13:14	5
Tetrachloroethene	ND		5.0	2.3	ug/L			05/12/22 13:14	5
Toluene	ND		5.0	2.3	ug/L			05/12/22 13:14	5
trans-1,2-Dichloroethene	ND		5.0	3.4	ug/L			05/12/22 13:14	5
trans-1,3-Dichloropropene	ND		5.0	2.9	ug/L			05/12/22 13:14	5
Trichloroethene	4.1 J	 	5.0	3.4	ug/L			05/12/22 13:14	5
Vinyl chloride	ND		5.0	2.0	ug/L			05/12/22 13:14	5
Dibromochloromethane	ND		5.0	4.2	ug/L			05/12/22 13:14	5
Bromodichloromethane	ND		5.0	3.2	ug/L			05/12/22 13:14	5
Chloroethane	ND		5.0	4.5	ug/L			05/12/22 13:14	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	137		28 - 163		05/12/22 13:14	5
4-Bromofluorobenzene (Surr)	102		41 - 122		05/12/22 13:14	5
Toluene-d8 (Surr)	83		53 - 125		05/12/22 13:14	5
Dibromofluoromethane (Surr)	115		59 - 168		05/12/22 13:14	5

Client Sample ID: POTW (051022)

Date Collected: 05/10/22 11:00 Date Received: 05/11/22 09:00 Lab Sample ID: 180-137972-4

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	3.0	ug/L			05/12/22 14:06	5
1,1,2,2-Tetrachloroethane	ND	*+	5.0	3.0	ug/L			05/12/22 14:06	5
1,1,2-Trichloroethane	ND	*+	5.0	2.3	ug/L			05/12/22 14:06	5
1,1-Dichloroethane	ND		5.0	1.5	ug/L			05/12/22 14:06	5
1,1-Dichloroethene	ND		5.0	2.8	ug/L			05/12/22 14:06	5
1,2-Dichloroethane	130		5.0	2.9	ug/L			05/12/22 14:06	5
1,2-Dichloropropane	ND		5.0	3.3	ug/L			05/12/22 14:06	5
1,2-Dichlorobenzene	ND		5.0	1.8	ug/L			05/12/22 14:06	5
1,3-Dichlorobenzene	ND		5.0	2.5	ug/L			05/12/22 14:06	5
1,4-Dichlorobenzene	ND		5.0	2.7	ug/L			05/12/22 14:06	5
2-Chloroethyl vinyl ether	ND		10	8.6	ug/L			05/12/22 14:06	5
Acrolein	ND		100	80	ug/L			05/12/22 14:06	5
Acrylonitrile	ND	*+	100	39	ug/L			05/12/22 14:06	5
Benzene	ND		5.0	3.0	ug/L			05/12/22 14:06	5
Bromoform	ND	*+	5.0	4.9	ug/L			05/12/22 14:06	5

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Client: ARCADIS U.S., Inc. Job ID: 180-137972-1

Project/Site: Cytec Havre de Grace MD

Client Sample ID: POTW (051022)

Date Collected: 05/10/22 11:00 Date Received: 05/11/22 09:00

Lab Sample ID: 180-137972-4

Matrix: Water

Analyte	Result Q	ualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND ND	5.0	4.4	ug/L			05/12/22 14:06	5
Carbon tetrachloride	ND	5.0	4.4	ug/L			05/12/22 14:06	5
Chlorobenzene	ND	5.0	2.5	ug/L			05/12/22 14:06	5
Chloroform	ND	5.0	3.0	ug/L			05/12/22 14:06	5
Chloromethane	ND	5.0	4.5	ug/L			05/12/22 14:06	5
cis-1,3-Dichloropropene	ND	5.0	3.0	ug/L			05/12/22 14:06	5
Ethylbenzene	ND	5.0	2.5	ug/L			05/12/22 14:06	5
Methylene Chloride	ND	5.0	4.4	ug/L			05/12/22 14:06	5
Tetrachloroethene	ND	5.0	2.3	ug/L			05/12/22 14:06	5
Toluene	ND	5.0	2.3	ug/L			05/12/22 14:06	5
trans-1,2-Dichloroethene	ND	5.0	3.4	ug/L			05/12/22 14:06	5
trans-1,3-Dichloropropene	ND	5.0	2.9	ug/L			05/12/22 14:06	5
Trichloroethene	4.0 J	5.0	3.4	ug/L			05/12/22 14:06	5
Vinyl chloride	ND	5.0	2.0	ug/L			05/12/22 14:06	5
Dibromochloromethane	ND	5.0	4.2	ug/L			05/12/22 14:06	5
Bromodichloromethane	ND	5.0	3.2	ug/L			05/12/22 14:06	5
Chloroethane	ND	5.0	4.5	ug/L			05/12/22 14:06	5
O	0/5					5	A t t	D# 5

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	136	28 - 163		05/12/22 14:06	5
4-Bromofluorobenzene (Surr)	101	41 - 122		05/12/22 14:06	5
Toluene-d8 (Surr)	85	53 - 125		05/12/22 14:06	5
Dibromofluoromethane (Surr)	112	59 - 168		05/12/22 14:06	5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	ND		0.20	0.068	ug/L		05/17/22 14:55	05/21/22 16:11	1
Acenaphthene	ND		0.20	0.068	ug/L		05/17/22 14:55	05/21/22 16:11	1
Anthracene	ND		0.20	0.051	ug/L		05/17/22 14:55	05/21/22 16:11	1
Benzidine	ND	F1	21	9.5	ug/L		05/17/22 14:55	05/21/22 16:11	1
Benzo[a]anthracene	ND		0.20	0.078	ug/L		05/17/22 14:55	05/21/22 16:11	1
Benzo[b]fluoranthene	ND		0.20	0.10	ug/L		05/17/22 14:55	05/21/22 16:11	1
Benzo[k]fluoranthene	ND		0.20	0.092	ug/L		05/17/22 14:55	05/21/22 16:11	1
Benzo[g,h,i]perylene	ND		0.20	0.072	ug/L		05/17/22 14:55	05/21/22 16:11	1
Benzo[a]pyrene	ND		0.20	0.055	ug/L		05/17/22 14:55	05/21/22 16:11	1
Bis(2-chloroethyl)ether	ND		0.20	0.042	ug/L		05/17/22 14:55	05/21/22 16:11	1
Bis(2-ethylhexyl) phthalate	ND		10	6.5	ug/L		05/17/22 14:55	05/21/22 16:11	1
4-Bromophenyl phenyl ether	ND		1.0	0.33	ug/L		05/17/22 14:55	05/21/22 16:11	1
Butyl benzyl phthalate	ND		1.0	0.48	ug/L		05/17/22 14:55	05/21/22 16:11	1
4-Chloro-3-methylphenol	ND		1.0	0.29	ug/L		05/17/22 14:55	05/21/22 16:11	1
2-Chloronaphthalene	ND		0.20	0.061	ug/L		05/17/22 14:55	05/21/22 16:11	1
2-Chlorophenol	ND		1.0	0.13	ug/L		05/17/22 14:55	05/21/22 16:11	1
Chrysene	ND		0.20	0.084	ug/L		05/17/22 14:55	05/21/22 16:11	1
Dibenzo(a,h)-anthracene	ND		0.20	0.075	ug/L		05/17/22 14:55	05/21/22 16:11	1
Di-n-butyl phthalate	2.1		1.0	0.77	ug/L		05/17/22 14:55	05/21/22 16:11	1
3,3'-Dichlorobenzidine	ND		1.0	0.61	ug/L		05/17/22 14:55	05/21/22 16:11	1
2,4-Dichlorophenol	ND		0.20	0.053	ug/L		05/17/22 14:55	05/21/22 16:11	1
Diethyl phthalate	ND		1.0	0.59	ug/L		05/17/22 14:55	05/21/22 16:11	1
2,4-Dimethylphenol	ND		1.0	0.17	ug/L		05/17/22 14:55	05/21/22 16:11	1
Dimethyl phthalate	ND		1.0	0.21	ug/L		05/17/22 14:55	05/21/22 16:11	1

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Phenol-d5

Silver

Zinc

Terphenyl-d14

Client Sample ID: POTW (051022)

Date Collected: 05/10/22 11:00 Date Received: 05/11/22 09:00 Lab Sample ID: 180-137972-4

Matrix: Water

Method: EPA 625.1 - Semivol Analyte		Qualifier	` RL	MDL		D	Prepared	Analyzed	Dil Fac
4,6-Dinitro-2-methylphenol	ND	<u> </u>	5.2	1.5	ug/L		05/17/22 14:55	05/21/22 16:11	
2,4-Dinitrophenol	ND		10		ug/L		05/17/22 14:55	05/21/22 16:11	1
2,4-Dinitrotoluene	ND		1.0	0.37	-		05/17/22 14:55	05/21/22 16:11	1
2,6-Dinitrotoluene	ND		1.0	0.18	ug/L		05/17/22 14:55	05/21/22 16:11	1
Di-n-octyl phthalate	ND		1.0	0.71	-		05/17/22 14:55	05/21/22 16:11	1
Fluoranthene	ND		0.20	0.063	ug/L		05/17/22 14:55	05/21/22 16:11	1
Fluorene	ND		0.20	0.072	ug/L		05/17/22 14:55	05/21/22 16:11	1
Hexachlorobenzene	ND		0.20	0.058	ug/L		05/17/22 14:55	05/21/22 16:11	1
Hexachlorobutadiene	ND		0.20	0.072	ug/L		05/17/22 14:55	05/21/22 16:11	1
Hexachlorocyclopentadiene	ND		1.0	0.52	ug/L		05/17/22 14:55	05/21/22 16:11	1
Hexachloroethane	ND		1.0	0.14	ug/L		05/17/22 14:55	05/21/22 16:11	1
Indeno[1,2,3-cd]pyrene	ND		0.20	0.089	ug/L		05/17/22 14:55	05/21/22 16:11	1
Isophorone	ND		1.0	0.20	ug/L		05/17/22 14:55	05/21/22 16:11	1
Naphthalene	ND		0.20	0.061	ug/L		05/17/22 14:55	05/21/22 16:11	1
Nitrobenzene	ND		2.1	0.52	ug/L		05/17/22 14:55	05/21/22 16:11	1
2-Nitrophenol	ND		1.0	0.20	ug/L		05/17/22 14:55	05/21/22 16:11	1
4-Nitrophenol	ND		5.2	0.98	ug/L		05/17/22 14:55	05/21/22 16:11	1
N-Nitrosodimethylamine	ND		1.0	0.070	ug/L		05/17/22 14:55	05/21/22 16:11	1
N-Nitrosodiphenylamine	ND		1.0	0.12	ug/L		05/17/22 14:55	05/21/22 16:11	1
N-Nitrosodi-n-propylamine	ND		0.20	0.074	ug/L		05/17/22 14:55	05/21/22 16:11	1
2,2'-oxybis[1-chloropropane]	ND		0.20	0.060	ug/L		05/17/22 14:55	05/21/22 16:11	1
Pentachlorophenol	ND		5.2	0.88	ug/L		05/17/22 14:55	05/21/22 16:11	1
Phenanthrene	ND		0.20	0.057	ug/L		05/17/22 14:55	05/21/22 16:11	1
Phenol	ND		1.0	0.51	ug/L		05/17/22 14:55	05/21/22 16:11	1
Pyrene	ND		0.20	0.056	ug/L		05/17/22 14:55	05/21/22 16:11	1
1,2,4-Trichlorobenzene	ND		1.0	0.14	ug/L		05/17/22 14:55	05/21/22 16:11	1
2,4,6-Trichlorophenol	ND		1.0	0.23	ug/L		05/17/22 14:55	05/21/22 16:11	1
Bis(2-chloroethoxy)methane	ND		1.0	0.16	ug/L		05/17/22 14:55	05/21/22 16:11	1
4-Chlorophenyl phenyl ether	ND		1.0	0.23	ug/L		05/17/22 14:55	05/21/22 16:11	1
1,2-Diphenylhydrazine(as	ND		1.0	0.20	ug/L		05/17/22 14:55	05/21/22 16:11	1
Azobenzene)									
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	73		47 - 107				05/17/22 14:55	05/21/22 16:11	1
2-Fluorophenol	68		35 - 109				05/17/22 14:55	05/21/22 16:11	1
2,4,6-Tribromophenol	52		32 - 127				05/17/22 14:55	05/21/22 16:11	1
Nitrobenzene-d5	80		47 - 110				05/17/22 14:55	05/21/22 16:11	1

Method: EPA 200.7 Rev	4 - Wetals (ICP) -	iotal Recov	erable						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.3	J	10	5.7	ug/L		05/18/22 13:03	05/19/22 23:55	1
Cadmium	ND		5.0	0.33	ug/L		05/18/22 13:03	05/19/22 23:55	1
Chromium	ND		5.0	2.6	ug/L		05/18/22 13:03	05/19/22 23:55	1
Copper	ND		25	3.9	ug/L		05/18/22 13:03	05/19/22 23:55	1
Lead	ND		10	2.3	ug/L		05/18/22 13:03	05/19/22 23:55	1
Nickel	5.7	J	40	2.1	ua/L		05/18/22 13:03	05/19/22 23:55	1

5.0

20

0.87 ug/L

3.3 ug/L

37 - 110

32 - 115

65

85

ND

6.0 J

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05/17/22 14:55 05/21/22 16:11

05/17/22 14:55 05/21/22 16:11

05/18/22 13:03 05/19/22 23:55

05/18/22 13:03 05/19/22 23:55

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1

Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 180-137972-1

Project/Site: Cytec Havre de Grace MD

Client Sample ID: POTW (051022)

Lab Sample ID: 180-137972-4

Date Collected: 05/10/22 11:00 **Matrix: Water** Date Received: 05/11/22 09:00

Method: EPA 245.1 Rev. - Mercury (CVAA) Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac 0.13 ug/L Mercury ND 0.20 06/01/22 07:25 06/01/22 18:43 **General Chemistry**

Analyte Result Qualifier RL MDL Unit Dil Fac Prepared Analyzed 05/17/22 08:00 05/17/22 13:50 Cyanide, Total 0.010 0.0080 mg/L 0.0091 J

Client Sample ID: TRIP BLANK Lab Sample ID: 180-137972-5

Date Collected: 05/10/22 00:00 **Matrix: Water** Date Received: 05/11/22 09:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			05/12/22 13:40	1
1,1,2,2-Tetrachloroethane	ND	*+	1.0	0.60	ug/L			05/12/22 13:40	1
1,1,2-Trichloroethane	ND	*+	1.0	0.45	ug/L			05/12/22 13:40	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			05/12/22 13:40	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			05/12/22 13:40	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			05/12/22 13:40	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			05/12/22 13:40	1
1,2-Dichlorobenzene	ND		1.0	0.36	ug/L			05/12/22 13:40	1
1,3-Dichlorobenzene	ND		1.0	0.50	ug/L			05/12/22 13:40	1
1,4-Dichlorobenzene	ND		1.0	0.54	ug/L			05/12/22 13:40	1
2-Chloroethyl vinyl ether	ND		2.0	1.7	ug/L			05/12/22 13:40	1
Acrolein	ND		20	16	ug/L			05/12/22 13:40	1
Acrylonitrile	ND	*+	20	7.8	ug/L			05/12/22 13:40	1
Benzene	ND		1.0	0.60	ug/L			05/12/22 13:40	1
Bromoform	ND	*+	1.0	0.98	ug/L			05/12/22 13:40	1
Bromomethane	ND		1.0	0.89	ug/L			05/12/22 13:40	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			05/12/22 13:40	1
Chlorobenzene	ND		1.0	0.50	ug/L			05/12/22 13:40	1
Chloroform	ND		1.0	0.60	ug/L			05/12/22 13:40	1
Chloromethane	ND		1.0	0.90	ug/L			05/12/22 13:40	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			05/12/22 13:40	1
Ethylbenzene	ND		1.0	0.51	ug/L			05/12/22 13:40	1
Methylene Chloride	ND		1.0	0.89	ug/L			05/12/22 13:40	1
Tetrachloroethene	ND		1.0	0.47	ug/L			05/12/22 13:40	1
Toluene	ND		1.0	0.46	ug/L			05/12/22 13:40	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			05/12/22 13:40	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			05/12/22 13:40	1
Trichloroethene	ND		1.0	0.69	ug/L			05/12/22 13:40	1
Vinyl chloride	ND		1.0	0.40	ug/L			05/12/22 13:40	1
Dibromochloromethane	ND		1.0	0.84	ug/L			05/12/22 13:40	1
Bromodichloromethane	ND		1.0	0.64	ug/L			05/12/22 13:40	1
Chloroethane	ND		1.0	0.90	ug/L			05/12/22 13:40	1
Surrogate	%Recovery	Qualifier	Limits			_	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	138		28 - 163			_		05/12/22 13:40	1
4-Bromofluorobenzene (Surr)	100		41 - 122					05/12/22 13:40	1
Toluene-d8 (Surr)	85		53 - 125					05/12/22 13:40	1
Dibromofluoromethane (Surr)	113		59 - 168					05/12/22 13:40	1
-									

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Client: ARCADIS U.S., Inc.

Job ID: 180-137972-1 Project/Site: Cytec Havre de Grace MD

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 180-398499/6

Matrix: Water

Analysis Batch: 398499

Client Sample ID: Method Blank

Prep Type: Total/NA

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.60	ug/L			05/12/22 09:46	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.60	ug/L			05/12/22 09:46	1
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			05/12/22 09:46	1
1,1-Dichloroethane	ND		1.0	0.31	ug/L			05/12/22 09:46	1
1,1-Dichloroethene	ND		1.0	0.55	ug/L			05/12/22 09:46	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			05/12/22 09:46	1
1,2-Dichloropropane	ND		1.0	0.66	ug/L			05/12/22 09:46	1
1,2-Dichlorobenzene	ND		1.0	0.36	ug/L			05/12/22 09:46	1
1,3-Dichlorobenzene	ND		1.0	0.50	ug/L			05/12/22 09:46	1
1,4-Dichlorobenzene	ND		1.0	0.54	ug/L			05/12/22 09:46	1
2-Chloroethyl vinyl ether	ND		2.0	1.7	ug/L			05/12/22 09:46	1
Acrolein	ND		20	16	ug/L			05/12/22 09:46	1
Acrylonitrile	ND		20	7.8	ug/L			05/12/22 09:46	1
Benzene	ND		1.0	0.60	ug/L			05/12/22 09:46	1
Bromoform	ND		1.0	0.98	ug/L			05/12/22 09:46	1
Bromomethane	ND		1.0	0.89	ug/L			05/12/22 09:46	1
Carbon tetrachloride	ND		1.0	0.88	ug/L			05/12/22 09:46	1
Chlorobenzene	ND		1.0	0.50	ug/L			05/12/22 09:46	1
Chloroform	ND		1.0	0.60	ug/L			05/12/22 09:46	1
Chloromethane	ND		1.0	0.90	ug/L			05/12/22 09:46	1
cis-1,3-Dichloropropene	ND		1.0	0.59	ug/L			05/12/22 09:46	1
Ethylbenzene	ND		1.0	0.51	ug/L			05/12/22 09:46	1
Methylene Chloride	ND		1.0	0.89	ug/L			05/12/22 09:46	1
Tetrachloroethene	ND		1.0	0.47	ug/L			05/12/22 09:46	1
Toluene	ND		1.0	0.46	ug/L			05/12/22 09:46	1
trans-1,2-Dichloroethene	ND		1.0	0.67	ug/L			05/12/22 09:46	1
trans-1,3-Dichloropropene	ND		1.0	0.58	ug/L			05/12/22 09:46	1
Trichloroethene	ND		1.0	0.69	ug/L			05/12/22 09:46	1
Vinyl chloride	ND		1.0	0.40	ug/L			05/12/22 09:46	1
Dibromochloromethane	ND		1.0	0.84	ug/L			05/12/22 09:46	1
Bromodichloromethane	ND		1.0	0.64	ug/L			05/12/22 09:46	1

MB	MB

Surrogate	%Recovery	Qualifier	Limits	Prepared Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	127		28 - 163	05/12/22 09:46	1
4-Bromofluorobenzene (Surr)	105		41 - 122	05/12/22 09:46	1
Toluene-d8 (Surr)	88		53 - 125	05/12/22 09:46	1
Dibromofluoromethane (Surr)	106		59 - 168	05/12/22 09:46	1

Lab Sample ID: LCS 180-398499/4

Matrix: Water

Analysis Batch: 398499

Client Sample ID: Lab Control Sample							
Prep Type: Total/NA							

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1,1-Trichloroethane	10.0	9.76		ug/L		98	70 - 130	
1,1,2,2-Tetrachloroethane	10.0	17.6	*+	ug/L		176	60 - 140	
1,1,2-Trichloroethane	10.0	13.1	*+	ug/L		131	70 - 130	
1,1-Dichloroethane	10.0	9.06		ug/L		91	70 - 130	

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Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-398499/4

Matrix: Water

Analysis Batch: 398499

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Job ID: 180-137972-1

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D %	Rec	Limits	
1,1-Dichloroethene	10.0	8.61		ug/L		86	50 - 150	
1,2-Dichloroethane	10.0	12.8		ug/L		128	70 - 130	
1,2-Dichloropropane	10.0	10.3		ug/L		103	35 - 165	
1,2-Dichlorobenzene	10.0	10.4		ug/L		104	65 - 135	
1,3-Dichlorobenzene	10.0	9.64		ug/L		96	70 - 130	
1,4-Dichlorobenzene	10.0	9.82		ug/L		98	65 - 135	
2-Chloroethyl vinyl ether	20.0	32.7		ug/L		164	10 - 170	
Acrolein	30.0	29.5		ug/L		98	60 - 140	
Acrylonitrile	100	305	*+	ug/L		305	60 - 140	
Benzene	10.0	9.29		ug/L		93	65 - 135	
Bromoform	10.0	15.5	*+	ug/L		155	70 - 130	
Bromomethane	10.0	5.87		ug/L		59	15 - 170	
Carbon tetrachloride	10.0	8.59		ug/L		86	70 - 130	
Chlorobenzene	10.0	9.71		ug/L		97	65 - 135	
Chloroform	10.0	9.92		ug/L		99	70 - 135	
Chloromethane	10.0	9.90		ug/L		99	10 - 170	
cis-1,3-Dichloropropene	10.0	14.0		ug/L		140	25 - 170	
Ethylbenzene	10.0	9.36		ug/L		94	60 - 140	
Methylene Chloride	10.0	8.95		ug/L		90	60 - 140	
Tetrachloroethene	10.0	9.49		ug/L		95	70 - 130	
Toluene	10.0	8.41		ug/L		84	70 - 130	
trans-1,2-Dichloroethene	10.0	8.79		ug/L		88	70 - 130	
trans-1,3-Dichloropropene	10.0	12.5		ug/L		125	50 - 150	
Trichloroethene	10.0	10.1		ug/L		101	65 - 135	
Vinyl chloride	10.0	7.57		ug/L		76	10 - 170	
Dibromochloromethane	10.0	11.5		ug/L		115	70 - 135	
Bromodichloromethane	10.0	10.4		ug/L		104	65 - 135	

10.0

9.70

ug/L

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	111		28 - 163
4-Bromofluorobenzene (Surr)	99		41 - 122
Toluene-d8 (Surr)	79		53 - 125
Dibromofluoromethane (Surr)	94		59 - 168

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 180-399113/1-A

Matrix: Water

Chloroethane

Analysis Batch: 399580

Client Sample ID: Method Blank Prep Type: Total/NA

40 - 160

97

Prep Batch: 399113

MB	MB							
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ND		0.19	0.065	ug/L		05/17/22 14:55	05/21/22 15:10	1
ND		0.19	0.065	ug/L		05/17/22 14:55	05/21/22 15:10	1
ND		0.19	0.049	ug/L		05/17/22 14:55	05/21/22 15:10	1
ND		20	9.1	ug/L		05/17/22 14:55	05/21/22 15:10	1
ND		0.19	0.075	ug/L		05/17/22 14:55	05/21/22 15:10	1
ND		0.19	0.097	ug/L		05/17/22 14:55	05/21/22 15:10	1
ND		0.19	0.088	ug/L		05/17/22 14:55	05/21/22 15:10	1
	Result ND ND ND ND ND ND ND ND ND	ND ND ND ND ND	Result Qualifier RL ND 0.19 ND 0.19 ND 0.19 ND 20 ND 0.19 ND 0.19 ND 0.19 ND 0.19	Result Qualifier RL MDL ND 0.19 0.065 ND 0.19 0.065 ND 0.19 0.049 ND 20 9.1 ND 0.19 0.075 ND 0.19 0.097	Result Qualifier RL MDL Unit ND 0.19 0.065 ug/L ND 0.19 0.065 ug/L ND 0.19 0.049 ug/L ND 20 9.1 ug/L ND 0.19 0.075 ug/L ND 0.19 0.097 ug/L	Result Qualifier RL MDL ug/L Unit D ND 0.19 0.065 ug/L ug/L ND 0.19 0.049 ug/L ND 20 9.1 ug/L ND 0.19 0.075 ug/L ND 0.19 0.097 ug/L	Result Qualifier RL MDL Unit D Prepared ND 0.19 0.065 ug/L 05/17/22 14:55 ND 0.19 0.065 ug/L 05/17/22 14:55 ND 0.19 0.049 ug/L 05/17/22 14:55 ND 20 9.1 ug/L 05/17/22 14:55 ND 0.19 0.075 ug/L 05/17/22 14:55 ND 0.19 0.097 ug/L 05/17/22 14:55 ND 0.19 0.097 ug/L 05/17/22 14:55	Result Qualifier RL MDL Unit D Prepared Analyzed ND 0.19 0.065 ug/L 05/17/22 14:55 05/21/22 15:10 ND 0.19 0.065 ug/L 05/17/22 14:55 05/21/22 15:10 ND 0.19 0.049 ug/L 05/17/22 14:55 05/21/22 15:10 ND 20 9.1 ug/L 05/17/22 14:55 05/21/22 15:10 ND 0.19 0.075 ug/L 05/17/22 14:55 05/21/22 15:10 ND 0.19 0.097 ug/L 05/17/22 14:55 05/21/22 15:10 ND 0.19 0.097 ug/L 05/17/22 14:55 05/21/22 15:10

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Client: ARCADIS U.S., Inc. Job ID: 180-137972-1

Project/Site: Cytec Havre de Grace MD

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-399113/1-A

Matrix: Water

2,4,6-Trichlorophenol

Azobenzene)

Bis(2-chloroethoxy)methane

4-Chlorophenyl phenyl ether

1,2-Diphenylhydrazine(as

Analysis Batch: 399580

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 399113

Allalysis Batch. 399300	MB	MB						Prep Batch.	399113
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND		0.19	0.069	ug/L		05/17/22 14:55	05/21/22 15:10	1
Benzo[a]pyrene	ND		0.19	0.053	ug/L		05/17/22 14:55	05/21/22 15:10	1
Bis(2-chloroethyl)ether	ND		0.19	0.040	ug/L		05/17/22 14:55	05/21/22 15:10	1
Bis(2-ethylhexyl) phthalate	ND		10	6.2	ug/L		05/17/22 14:55	05/21/22 15:10	1
4-Bromophenyl phenyl ether	ND		1.0	0.32	ug/L		05/17/22 14:55	05/21/22 15:10	1
Butyl benzyl phthalate	ND		1.0	0.46	ug/L		05/17/22 14:55	05/21/22 15:10	1
4-Chloro-3-methylphenol	ND		1.0	0.28	ug/L		05/17/22 14:55	05/21/22 15:10	1
2-Chloronaphthalene	ND		0.19	0.059	ug/L		05/17/22 14:55	05/21/22 15:10	1
2-Chlorophenol	ND		1.0	0.13	ug/L		05/17/22 14:55	05/21/22 15:10	1
Chrysene	ND		0.19	0.081	ug/L		05/17/22 14:55	05/21/22 15:10	1
Dibenzo(a,h)-anthracene	ND		0.19	0.072	ug/L		05/17/22 14:55	05/21/22 15:10	1
Di-n-butyl phthalate	ND		1.0	0.74	ug/L		05/17/22 14:55	05/21/22 15:10	1
3,3'-Dichlorobenzidine	ND		1.0	0.58	ug/L		05/17/22 14:55	05/21/22 15:10	1
2,4-Dichlorophenol	ND		0.19	0.051	ug/L		05/17/22 14:55	05/21/22 15:10	1
Diethyl phthalate	ND		1.0	0.57	ug/L		05/17/22 14:55	05/21/22 15:10	1
2,4-Dimethylphenol	ND		1.0	0.17	ug/L		05/17/22 14:55	05/21/22 15:10	1
Dimethyl phthalate	ND		1.0	0.20	ug/L		05/17/22 14:55	05/21/22 15:10	1
4,6-Dinitro-2-methylphenol	ND		5.0	1.5	ug/L		05/17/22 14:55	05/21/22 15:10	1
2,4-Dinitrophenol	ND		10	1.5	ug/L		05/17/22 14:55	05/21/22 15:10	1
2,4-Dinitrotoluene	ND		1.0	0.35	ug/L		05/17/22 14:55	05/21/22 15:10	1
2,6-Dinitrotoluene	ND		1.0		ug/L		05/17/22 14:55	05/21/22 15:10	1
Di-n-octyl phthalate	ND		1.0		ug/L		05/17/22 14:55	05/21/22 15:10	1
Fluoranthene	ND		0.19	0.060	•		05/17/22 14:55	05/21/22 15:10	1
Fluorene	ND		0.19	0.069	ug/L		05/17/22 14:55	05/21/22 15:10	1
Hexachlorobenzene	ND		0.19	0.056	-		05/17/22 14:55	05/21/22 15:10	1
Hexachlorobutadiene	ND		0.19	0.069	ug/L		05/17/22 14:55	05/21/22 15:10	1
Hexachlorocyclopentadiene	ND		1.0		ug/L		05/17/22 14:55	05/21/22 15:10	1
Hexachloroethane	ND		1.0		ug/L		05/17/22 14:55	05/21/22 15:10	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.085	-		05/17/22 14:55	05/21/22 15:10	1
Isophorone	ND		1.0	0.19	ug/L		05/17/22 14:55	05/21/22 15:10	1
Naphthalene	ND		0.19	0.059	-		05/17/22 14:55	05/21/22 15:10	1
Nitrobenzene	ND		2.0		ug/L		05/17/22 14:55	05/21/22 15:10	1
2-Nitrophenol	ND		1.0		ug/L			05/21/22 15:10	1
4-Nitrophenol	ND		5.0		ug/L		05/17/22 14:55	05/21/22 15:10	1
N-Nitrosodimethylamine	ND		1.0	0.067	-		05/17/22 14:55	05/21/22 15:10	1
N-Nitrosodiphenylamine	ND		1.0		ug/L			05/21/22 15:10	1
N-Nitrosodi-n-propylamine	ND		0.19	0.071	•			05/21/22 15:10	1
2,2'-oxybis[1-chloropropane]	ND		0.19	0.058				05/21/22 15:10	1
Pentachlorophenol	ND		5.0		ug/L			05/21/22 15:10	1
Phenanthrene	ND		0.19	0.055				05/21/22 15:10	1
Phenol	ND		1.0		ug/L			05/21/22 15:10	1
Pyrene	ND		0.19	0.054				05/21/22 15:10	
1,2,4-Trichlorobenzene	ND		1.0		ug/L			05/21/22 15:10	1
0.4.C. Trickle and a sel	ND.		1.0	0.10	g, /I		05/17/22 14:00	05/21/22 10:10	,

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05/17/22 14:55 05/21/22 15:10

05/17/22 14:55 05/21/22 15:10

05/17/22 14:55 05/21/22 15:10

05/17/22 14:55 05/21/22 15:10

1.0

1.0

1.0

1.0

0.22 ug/L

0.15 ug/L

0.22 ug/L

0.20 ug/L

ND

ND

ND

ND

Client: ARCADIS U.S., Inc.

Job ID: 180-137972-1

Project/Site: Cytec Havre de Grace MD

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-399113/1-A

Matrix: Water

Analysis Batch: 399580

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 399113

	MB	MB				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	90		47 - 107	05/17/22 14:55	05/21/22 15:10	1
2-Fluorophenol	98		35 - 109	05/17/22 14:55	05/21/22 15:10	1
2,4,6-Tribromophenol	69		32 - 127	05/17/22 14:55	05/21/22 15:10	1
Nitrobenzene-d5	95		47 - 110	05/17/22 14:55	05/21/22 15:10	1
Phenol-d5	94		37 - 110	05/17/22 14:55	05/21/22 15:10	1
Terphenyl-d14	96		32 - 115	05/17/22 14:55	05/21/22 15:10	1

Spike

LCS LCS

Lab Sample ID: LCS 180-399113/2-A

Matrix: Water

Indeno[1,2,3-cd]pyrene

Analysis Batch: 399580

Prep Type: Total/NA

Prep Batch: 399113 %Rec

	Opino	LOG LOG			/01 10 C	
Analyte	Added	Result Qualifier	Unit	D %Rec	Limits	
Acenaphthylene	10.0	7.72	ug/L	77	33 - 145	
Acenaphthene	10.0	7.45	ug/L	75	47 - 145	
Anthracene	10.0	7.54	ug/L	75	27 - 133	
Benzidine	10.0	ND	ug/L	22	5 - 100	
Benzo[a]anthracene	10.0	7.42	ug/L	74	33 - 143	
Benzo[b]fluoranthene	10.0	6.16	ug/L	62	24 - 150	
Benzo[k]fluoranthene	10.0	7.50	ug/L	75	11 - 150	
Benzo[g,h,i]perylene	10.0	7.90	ug/L	79	10 - 150	
Benzo[a]pyrene	10.0	7.60	ug/L	76	17 - 150	
Bis(2-chloroethyl)ether	10.0	7.61	ug/L	76	12 - 150	
Bis(2-ethylhexyl) phthalate	10.0	8.12 J	ug/L	81	10 - 150	
4-Bromophenyl phenyl ether	10.0	7.13	ug/L	71	53 - 127	
Butyl benzyl phthalate	10.0	8.17	ug/L	82	10 - 150	
4-Chloro-3-methylphenol	10.0	8.40	ug/L	84	22 - 147	
2-Chloronaphthalene	10.0	7.26	ug/L	73	60 - 120	
2-Chlorophenol	10.0	7.75	ug/L	77	23 - 134	
Chrysene	10.0	7.27	ug/L	73	17 - 150	
Dibenzo(a,h)-anthracene	10.0	7.52	ug/L	75	10 - 150	
Di-n-butyl phthalate	10.0	7.88	ug/L	79	10 - 120	
3,3'-Dichlorobenzidine	10.0	6.31	ug/L	63	10 - 150	
2,4-Dichlorophenol	10.0	7.63	ug/L	76	39 - 135	
Diethyl phthalate	10.0	7.58	ug/L	76	10 - 120	
2,4-Dimethylphenol	10.0	8.21	ug/L	82	32 - 120	
Dimethyl phthalate	10.0	7.11	ug/L	71	10 - 120	
4,6-Dinitro-2-methylphenol	20.0	12.1	ug/L	61	10 - 150	
2,4-Dinitrophenol	20.0	10.5	ug/L	52	10 - 150	
2,4-Dinitrotoluene	10.0	7.69	ug/L	77	39 - 139	
2,6-Dinitrotoluene	10.0	7.56	ug/L	76	50 - 150	
Di-n-octyl phthalate	10.0	6.83	ug/L	68	10 - 146	
Fluoranthene	10.0	7.66	ug/L	77	26 - 137	
Fluorene	10.0	7.41	ug/L	74	59 - 121	
Hexachlorobenzene	10.0	6.74	ug/L	67	10 - 150	
Hexachlorobutadiene	10.0	7.13	ug/L	71	24 - 120	
Hexachlorocyclopentadiene	10.0	6.68	ug/L	67	37 - 121	
Hexachloroethane	10.0	8.41	ug/L	84	40 - 120	

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10 - 150

78

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7.77

ug/L

10.0

9

3

6

<u>/</u>

0

10

12

6/2/2022

Client: ARCADIS U.S., Inc. Job ID: 180-137972-1

Project/Site: Cytec Havre de Grace MD

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-399113/2-A

Matrix: Water

Analysis Batch: 399580

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 399113

	Spike	LCS I	LCS		%Rec	
Analyte	Added	Result (Qualifier Unit	D %Rec	Limits	
Isophorone	10.0	7.91	ug/L	79	21 - 150	
Naphthalene	10.0	7.53	ug/L	75	21 - 133	
Nitrobenzene	10.0	7.99	ug/L	80	35 - 150	
2-Nitrophenol	10.0	7.87	ug/L	79	29 - 150	
4-Nitrophenol	20.0	16.4	ug/L	82	10 - 132	
N-Nitrosodimethylamine	10.0	7.82	ug/L	78	33 - 130	
N-Nitrosodiphenylamine	10.0	7.18	ug/L	72	51 - 100	
N-Nitrosodi-n-propylamine	10.0	8.24	ug/L	82	10 - 150	
2,2'-oxybis[1-chloropropane]	10.0	8.43	ug/L	84	36 - 150	
Pentachlorophenol	20.0	12.2	ug/L	61	14 - 150	
Phenanthrene	10.0	7.20	ug/L	72	54 - 120	
Phenol	10.0	7.69	ug/L	77	10 - 120	
Pyrene	10.0	7.47	ug/L	75	52 - 120	
1,2,4-Trichlorobenzene	10.0	7.19	ug/L	72	44 - 142	
2,4,6-Trichlorophenol	10.0	7.36	ug/L	74	37 - 144	
Bis(2-chloroethoxy)methane	10.0	6.55	ug/L	65	33 - 150	
4-Chlorophenyl phenyl ether	10.0	7.09	ug/L	71	25 - 150	
1,2-Diphenylhydrazine(as	10.0	8.01	ug/L	80	43 - 105	
Azobenzene)						

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl	74		47 - 107
2-Fluorophenol	80		35 - 109
2,4,6-Tribromophenol	71		32 - 127
Nitrobenzene-d5	84		47 - 110
Phenol-d5	79		37 - 110
Terphenyl-d14	71		32 - 115

Lab Sample ID: 180-137972-4 MS

Matrix: Water

Analysis Batch: 399580

Client Sam	ple IC): POTV	N (051022)
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Prep Type: Total/NA

Prep Batch: 399113

Analysis Batch. 000000	Sample	Sample	Spike	MS	MS				%Rec
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Acenaphthylene	ND		10.4	7.72		ug/L		74	35 - 145
Acenaphthene	ND		10.4	7.38		ug/L		71	47 - 145
Anthracene	ND		10.4	7.79		ug/L		75	27 - 133
Benzidine	ND	F1	10.4	ND	F1	ug/L		0	5 - 100
Benzo[a]anthracene	ND		10.4	7.88		ug/L		76	33 - 143
Benzo[b]fluoranthene	ND		10.4	7.11		ug/L		68	24 - 159
Benzo[k]fluoranthene	ND		10.4	7.59		ug/L		73	11 - 162
Benzo[g,h,i]perylene	ND		10.4	8.59		ug/L		82	10 - 170
Benzo[a]pyrene	ND		10.4	7.98		ug/L		77	17 - 163
Bis(2-chloroethyl)ether	ND		10.4	7.48		ug/L		72	12 - 158
Bis(2-ethylhexyl) phthalate	ND		10.4	9.76	J	ug/L		94	10 - 158
4-Bromophenyl phenyl ether	ND		10.4	7.31		ug/L		70	53 - 127
Butyl benzyl phthalate	ND		10.4	9.58		ug/L		92	10 - 152
4-Chloro-3-methylphenol	ND		10.4	7.04		ug/L		68	22 - 147
2-Chloronaphthalene	ND		10.4	7.07		ug/L		68	60 - 120
2-Chlorophenol	ND		10.4	5.99		ug/L		58	23 - 134

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1

Spike

Client: ARCADIS U.S., Inc. Job ID: 180-137972-1

MS MS

Project/Site: Cytec Havre de Grace MD

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Sample Sample

ND

Lab Sample ID: 180-137972-4 MS

Matrix: Water

Analysis Batch: 399580

Client Sample ID: POTW (051022)

Prep Type: Total/NA

_	Batch: 399113	
%Rec		

Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chrysene	ND		10.4	7.72		ug/L		74	17 - 168	
Dibenzo(a,h)-anthracene	ND		10.4	8.25		ug/L		79	10 - 170	
Di-n-butyl phthalate	2.1		10.4	11.5		ug/L		90	10 - 120	
3,3'-Dichlorobenzidine	ND		10.4	6.06		ug/L		58	10 - 170	
2,4-Dichlorophenol	ND		10.4	5.67		ug/L		54	39 - 135	
Diethyl phthalate	ND		10.4	6.61		ug/L		63	10 - 120	
2,4-Dimethylphenol	ND		10.4	7.10		ug/L		68	32 - 120	
Dimethyl phthalate	ND		10.4	6.06		ug/L		58	10 - 120	
4,6-Dinitro-2-methylphenol	ND		20.8	13.6		ug/L		65	10 - 170	
2,4-Dinitrophenol	ND		20.8	14.2		ug/L		68	10 - 170	
2,4-Dinitrotoluene	ND		10.4	8.03		ug/L		77	39 ₋ 139	
2,6-Dinitrotoluene	ND		10.4	7.92		ug/L		76	50 - 158	
Di-n-octyl phthalate	ND		10.4	8.18		ug/L		79	10 - 146	
Fluoranthene	ND		10.4	8.14		ug/L		78	26 - 137	
Fluorene	ND		10.4	7.36		ug/L		71	59 - 121	
Hexachlorobenzene	ND		10.4	6.95		ug/L		67	10 - 152	
Hexachlorobutadiene	ND		10.4	6.25		ug/L		60	24 - 120	
Hexachlorocyclopentadiene	ND		10.4	5.33		ug/L		51	41 - 106	
Hexachloroethane	ND		10.4	7.58		ug/L		73	40 - 120	

ND 10.4 7.53 ug/L 72 21 - 170 ND 10.4 6.77 ug/L 65 21 - 133 ND 10.4 7.54 ug/L 72 35 - 170ND 10.4 5.98 57 29 - 170 ug/L ND 20.8 63 13.2 ug/L 10 - 132 N-Nitrosodimethylamine ND 10.4 7.21 ug/L 69 48 - 109 70 56 - 100 N-Nitrosodiphenylamine ND 10.4 7.29 ug/L

8.28

10.4

ug/L

80

10 - 170

N-Nitrosodi-n-propylamine ND 10.4 7.85 ug/L 75 10 - 170 2,2'-oxybis[1-chloropropane] ND 10.4 8.05 ug/L 77 36 - 166 Pentachlorophenol ND 20.8 8.94 ug/L 43 17 - 170 ND 10.4 7.63 ug/L 73 54 - 120 ND 10.4 6.06 ug/L 58 10 - 120 76 ND 10.4 7.88 ug/L 52 - 120

Pyrene 62 1,2,4-Trichlorobenzene ND 10.4 ug/L 44 - 142 6.48 ND 10.4 5.63 54 37 - 144 2,4,6-Trichlorophenol ug/L Bis(2-chloroethoxy)methane ND 10.4 6.31 ug/L 61 33 - 170

4-Chlorophenyl phenyl ether ND 10.4 7.15 ug/L 25 - 158 ND 10.4 ug/L 82 46 - 103 1,2-Diphenylhydrazine(as 8.49

Azobenzene)

Indeno[1,2,3-cd]pyrene

Isophorone

Naphthalene

Nitrobenzene

2-Nitrophenol

4-Nitrophenol

Phenanthrene

Phenol

ИS	MS
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Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl	66	-	47 - 107
2-Fluorophenol	59		35 - 109
2,4,6-Tribromophenol	50		32 - 127
Nitrobenzene-d5	74		47 - 110
Phenol-d5	61		37 - 110
Terphenyl-d14	73		32 - 115

Client: ARCADIS U.S., Inc.

Job ID: 180-137972-1 Project/Site: Cytec Havre de Grace MD

MD MD

Method: EPA 200.7 Rev 4 - Metals (ICP)

Lab Sample ID: MB 180-399223/1-A

Matrix: Water

Analysis Batch: 399442

Client Sample ID: Method Blank **Prep Type: Total Recoverable Prep Batch: 399223**

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Prep Batch: 399223

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10	5.7	ug/L		05/18/22 13:03	05/19/22 22:56	1
Cadmium	ND		5.0	0.33	ug/L		05/18/22 13:03	05/19/22 22:56	1
Chromium	ND		5.0	2.6	ug/L		05/18/22 13:03	05/19/22 22:56	1
Copper	ND		25	3.9	ug/L		05/18/22 13:03	05/19/22 22:56	1
Lead	ND		10	2.3	ug/L		05/18/22 13:03	05/19/22 22:56	1
Nickel	ND		40	2.1	ug/L		05/18/22 13:03	05/19/22 22:56	1
Silver	ND		5.0	0.87	ug/L		05/18/22 13:03	05/19/22 22:56	1
Zinc	ND		20	3.3	ug/L		05/18/22 13:03	05/19/22 22:56	1
<u> </u>									

Lab Sample ID: LCS 180-399223/2-A

Matrix: Water

Analysis Batch: 399442

LCS LCS %Rec Spike Analyte Added Result Qualifier D %Rec Limits Unit Arsenic 1000 1130 85 - 115 ug/L 113 500 552 ug/L 110 85 - 115 500 531 ug/L 106 85 - 115

Cadmium Chromium 500 518 104 85 - 115 Copper ug/L Lead 500 542 108 85 - 115 ug/L ug/L Nickel 500 548 110 85 _ 115 Silver 250 272 ug/L 109 85 - 115 Zinc 250 273 ug/L 109 85 - 115

Method: EPA 245.1 Rev. - Mercury (CVAA)

Lab Sample ID: MB 180-400485/1-A

Matrix: Water

Analysis Batch: 400599

MB MB

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Mercury $\overline{\mathsf{ND}}$ 0.20 0.13 ug/L 06/01/22 07:25 06/01/22 18:12

Spike

Added

2.50

LCS LCS

2.73

Result Qualifier

Lab Sample ID: LCS 180-400485/2-A

Matrix: Water

Analyte

Analysis Batch: 400599

Lab Sample ID: MB 180-398646/4-A

Matrix: Water

Analysis Batch: 399126

MB MB

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Cyanide, Total ND 0.010 0.0080 mg/L 05/17/22 08:00 05/17/22 13:22

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Unit

ug/L

10

Prep Type: Total/NA

Prep Batch: 400485

Client Sample ID: Lab Control Sample Prep Type: Total/NA

Prep Batch: 400485

%Rec Limits

85 - 115

%Rec

109

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 398646

Client: ARCADIS U.S., Inc. Job ID: 180-137972-1

Project/Site: Cytec Havre de Grace MD

Method: SM 4500CN E - Total Cyanide (Continued)

Analyte

Cyanide, Total

Lab Sample ID: HLCS 180-398646/2-A				Clie	Client Sample ID: Lab Control Sample			
Matrix: Water							Prep Type: Total/NA	
Analysis Batch: 399126							Prep Batch: 398646	
	Spike	HLCS	HLCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Cyanide, Total	0.250	0.251		mg/L		100	90 - 110	
Lab Sample ID: LCS 180-398646/3-A				Clie	nt Sar	nple ID	: Lab Control Sample	
Matrix: Water							Prep Type: Total/NA	
Analysis Batch: 399126							Prep Batch: 398646	
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Cyanide, Total	0.200	0.198		mg/L		99	90 - 110	
Lab Sample ID: LLCS 180-398646/1-A Matrix: Water Analysis Batch: 399126				Clie	nt Sar	nple ID	: Lab Control Sample Prep Type: Total/NA Prep Batch: 398646	

LLCS LLCS

0.0509

Result Qualifier Unit

mg/L

Spike

Added

0.0500

%Rec

Limits

90 - 110

D %Rec

102

QC Association Summary

Client: ARCADIS U.S., Inc.

Job ID: 180-137972-1 Project/Site: Cytec Havre de Grace MD

GC/MS VOA

Analysis Batch: 398499

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-137972-1	EW-1 (051022)	Total/NA	Water	EPA 624.1	
180-137972-2	MW-10D (051022)	Total/NA	Water	EPA 624.1	
180-137972-3	EFFLUENT (051022)	Total/NA	Water	EPA 624.1	
180-137972-4	POTW (051022)	Total/NA	Water	EPA 624.1	
180-137972-5	TRIP BLANK	Total/NA	Water	EPA 624.1	
MB 180-398499/6	Method Blank	Total/NA	Water	EPA 624.1	
LCS 180-398499/4	Lab Control Sample	Total/NA	Water	EPA 624.1	

GC/MS Semi VOA

Prep Batch: 399113

Lab Sample ID 180-137972-4	Client Sample ID POTW (051022)	Prep Type Total/NA	Matrix Water	Method 625	Prep Batch
MB 180-399113/1-A	Method Blank	Total/NA	Water	625	
LCS 180-399113/2-A	Lab Control Sample	Total/NA	Water	625	
180-137972-4 MS	POTW (051022)	Total/NA	Water	625	

Analysis Batch: 399580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-137972-4	POTW (051022)	Total/NA	Water	EPA 625.1	399113
MB 180-399113/1-A	Method Blank	Total/NA	Water	EPA 625.1	399113
LCS 180-399113/2-A	Lab Control Sample	Total/NA	Water	EPA 625.1	399113
180-137972-4 MS	POTW (051022)	Total/NA	Water	EPA 625.1	399113

Metals

Prep Batch: 399223

Lab Sample ID 180-137972-4	Client Sample ID POTW (051022)	Prep Type Total Recoverable	Water	Method 200.7	Prep Batch
MB 180-399223/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 180-399223/2-A	Lab Control Sample	Total Recoverable	Water	200.7	

Analysis Batch: 399442

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-137972-4	POTW (051022)	Total Recoverable	Water	EPA 200.7 Rev 4	399223
MB 180-399223/1-A	Method Blank	Total Recoverable	Water	EPA 200.7 Rev 4	399223
LCS 180-399223/2-A	Lab Control Sample	Total Recoverable	Water	EPA 200.7 Rev 4	399223

Prep Batch: 400485

Lab Sample ID 180-137972-4	Client Sample ID POTW (051022)	Prep Type Total/NA	Matrix Water	Method 245.1	Prep Batch
MB 180-400485/1-A	Method Blank	Total/NA	Water	245.1	
LCS 180-400485/2-A	Lab Control Sample	Total/NA	Water	245.1	

Analysis Batch: 400599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-137972-4	POTW (051022)	Total/NA	Water	EPA 245.1 Rev.	400485
MB 180-400485/1-A	Method Blank	Total/NA	Water	EPA 245.1 Rev.	400485
LCS 180-400485/2-A	Lab Control Sample	Total/NA	Water	EPA 245.1 Rev.	400485

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QC Association Summary

Client: ARCADIS U.S., Inc. Job ID: 180-137972-1

Project/Site: Cytec Havre de Grace MD

General Chemistry

Prep Batch: 398646

Lab Sample ID 180-137972-4	Client Sample ID POTW (051022)	Prep Type Total/NA	Matrix Water	Method SM 4500 CN C	Prep Batch
MB 180-398646/4-A	Method Blank	Total/NA	Water	SM 4500 CN C	
HLCS 180-398646/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LCS 180-398646/3-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LLCS 180-398646/1-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	

Analysis Batch: 399126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-137972-4	POTW (051022)	Total/NA	Water	SM 4500CN E	398646
MB 180-398646/4-A	Method Blank	Total/NA	Water	SM 4500CN E	398646
HLCS 180-398646/2-A	Lab Control Sample	Total/NA	Water	SM 4500CN E	398646
LCS 180-398646/3-A	Lab Control Sample	Total/NA	Water	SM 4500CN E	398646
LLCS 180-398646/1-A	Lab Control Sample	Total/NA	Water	SM 4500CN E	398646

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Pittsburgh, PA 15238

Chain of Custody Record

Baltimore #201

🚓 eurofins

Environment Testing America

Phone: 412-963-7058 Fax: 412-963-2468												78	20	.1	è				
Client Information	Sampler: An	dy F	eild	Col	РМ: ussy, J	ill L						rrier Tra		No(s):		COC No: 180-77576	5-14808.	.1	
Client Contact Ms. Shwetha Sridharan	Phone: 443	dy F1 354	0186	E-Ma Jill.	^{ail:} Coluss	y@Eur	ofinse	et.com			St	ete of O	rigin:	ano	/	Page: Page 1 of	1		
Company: ARCADIS U.S., Inc.	•		PWSID:				,	1	Analy	sis F						Job #:			-
Address: 7550 Teague Road Suite 210	Due Date Request	ed: St	andurd		91		18	2							7 47	Preservation	on Code:	s:	
City: Hanover	TAT Requested (d	ays):						7							1000	A - HCL B - NaOH		VI - Hexane VI - None	
State, Zip:			<i>smal</i>				2	7		m						C - Zn Aceta D - Nitric Ac	id 1	0 - AsNaO	S
MD, 21076 Phone:	Compliance Proje	ct: A Yes	ΔNo		-	PR EC	7	S.		000						E - NaHSO4	i	Q - Na2SO: R - Na2S2O	D3
302-897-8993(Tel) Email:	30005455.0002 Wo #:	2.			(0)	1		29	2							G - Amchlor H - Ascorbic	Acid	S - H2SO4 I - TSP Doo J - Acetone	decahydrate
shwetha.sridharan@arcadis.com				- 10	0.0	-	S	3		450						J - DI Water	١.	/ - MCAA // - pH 4-5	
Project Name: Cytec Havre de Grace MD	Project #: 18017987				3(0/6	7	_ 1	65	20	2						L - EDIA		Z - other (s	
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Possible Hazard Identification					Sa					nay b	e asse	essed	if san	nples a	re retail	ned longer t	han 1 m	onth)	
Non-Hazard Flammable Skin Irritant Po	oison B Unkn	own 🗀 j	Radiological		-	Re:		o Clie		L	Disp	osal E	By Lab		☐ Arc	chive For		Months	
Deliverable Requested: I, II, III, IV, Other (specify)					Эр	eciai ir	istruci	tions/c	JC Re	quirer	nents.	1							
Empty Kit Relinquished by:	Date/Time:	Date:	lo	ompany	Time:	Receive	ed by:	0	1		0	Meth		hipment:	. 1		Ir	Company	
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Custody Seals Intact: Custody Seal No.:				÷		Cooler	Tempe	rature(s	c) °C and	d Other	Remark	cs:				, ,			
Δ Yes Δ No			Pac	e 26 of	27	L													6/2/20

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 180-137972-1

Login Number: 137972 List Source: Eurofins Pittsburgh

List Number: 1

Creator: Watson, Debbie

Creator: watson, Debbie		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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Cytec Solvay Group 1300 Revolution Street Havre de Grace, MD 21078 410.939.1910

July 14, 2022

Mr. Ken Montgomery Industrial Pretreatment Coordinator City of Havre de Grace Department of Public Works 711 Pennington Avenue Havre de Grace, Maryland 21078

Re: CYTEC SOLVAY GROUP AEROSPACE MATERIALS

Periodic Compliance Report – June 2022

Permit Number: CYT-2015-101

Dear Mr. Montgomery:

CYTEC SOLVAY GROUP (Cytec) has prepared this Periodic Compliance Report for the month of June 2022 in accordance with the conditions set forth in Cytec's Industrial User Wastewater Discharge Permit (Permit No. CYT-2015-101). This Periodic Compliance Report presents the results of all monitoring requirements and operational issues encountered during the month of June 2022. The monthly certification form is included as Attachment A.

For the month of June, the system pumped an estimated 280,172 gallons of wastewater at an estimated average flow rate of 6.49 gallons per minute to the City of Havre de Grace Wastewater Treatment Plant during active system operation. The estimated average flow rate of 6.49 gallons per minute for the month of June satisfied both permit flow limitations (maximum of 30,000 gallons per day; 30-minute maximum of 1,000 gallons).

One pH meter is presently installed in-line with the effluent discharge pipe to measure pH continuously. pH results from the effluent wastewater complied with all permit conditions for pH during the month of June and no significant deviations were noted during active operation. Table 1 presents the daily flow volumes and weekly pH readings recorded for the month of June.

As noted in the March 2022 report, the pump motor at EW-02 is faulty and currently pending replacement, dependent on when parts can be shipped from the manufacturer, and EW-02 has been shut down since March 15, 2022. On June 27, a pipe leak within the system shed from MW-10D was discovered and the system was manually shut down. Arcadis staff was onsite July 11 and 12 and identified a leaking flange. The system will remain off until necessary replacement parts are available to repair the piping, expected to be completed in July 2022.

The July Compliance Report will be submitted in August 2022. Daily flow and pH will continue to be measured continuously. If the system is shut down for a period of at least 24 hours, pH results will be monitored and reported for three consecutive days to maintain compliance with permit conditions.

If you have any questions or comments, please contact me at 443-252-1093.

Sincerely, Cytec Solvay Group

Jose Cortez HSE Manager

Enclosure

cc: Mr. Luis Pizarro, United States Environmental Protection Agency

Mr. Charles Jones, Cytec Solvay Group

Mr. Joshua Wilson, Arcadis Ms. Shwetha Sridharan, Arcadis

Table 1 Flow and pH Monitoring for June 2022 Cytec Solvay Group Havre de Grace, Maryland

Date	Cumulative Total Gallons Extracted (MW-10D)	Cumulative Total Gallons Extracted (EW-01)	Cumulative Total Gallons Extracted (EW-02)	Combined Cumulative Total Gallons Extracted	Daily Total Gallons Extracted	pН
06/01/22	20,017,019	4,487,299	3,408,166	27,912,484	10,667	
06/02/22	20,025,990	4,488,995	3,408,166	27,923,151	10,667	
06/03/22	20,034,963	4,490,689	3,408,166	27,933,818	10,675	5.82
06/04/22	20,043,937	4,492,390	3,408,166	27,944,493	10,674	
06/05/22	20,052,912	4,494,089	3,408,166	27,955,167	10,681	
06/06/22	20,061,888	4,495,794	3,408,166	27,965,848	10,677	
06/07/22	20,070,863	4,497,496	3,408,166	27,976,525	10,680	
06/08/22	20,079,840	4,499,199	3,408,166	27,987,205	10,663	
06/09/22	20,088,812	4,500,890	3,408,166	27,997,868	10,674	
06/10/22	20,097,787	4,502,589	3,408,166	28,008,542	10,676	5.81
06/11/22	20,106,762	4,504,290	3,408,166	28,019,218	10,686	
06/12/22	20,115,741	4,505,997	3,408,166	28,029,904	10,670	
06/13/22	20,124,716	4,507,692	3,408,166	28,040,574	10,661	
06/14/22	20,133,687	4,509,382	3,408,166	28,051,235	10,669	
06/15/22	20,142,660	4,511,078	3,408,166	28,061,904	10,663	
06/16/22	20,151,631	4,512,770	3,408,166	28,072,567	10,666	
06/17/22	20,160,604	4,514,463	3,408,166	28,083,233	10,660	5.81
06/18/22	20,169,573	4,516,154	3,408,166	28,093,893	10,678	
06/19/22	20,178,549	4,517,856	3,408,166	28,104,571	10,683	
06/20/22	20,187,526	4,519,562	3,408,166	28,115,254	10,681	
06/21/22	20,196,502	4,521,267	3,408,166	28,125,935	10,675	
06/22/22	20,205,477	4,522,967	3,408,166	28,136,610	10,677	
06/23/22	20,214,453	4,524,668	3,408,166	28,147,287	10,687	
06/24/22	20,223,433	4,526,375	3,408,166	28,157,974	10,671	5.80
06/25/22	20,232,407	4,528,072	3,408,166	28,168,645	10,665	
06/26/22	20,241,379	4,529,765	3,408,166	28,179,310	10,666	
06/27/22	20,250,351	4,531,459	3,408,166	28,189,976	2,680	
06/28/22	20,252,606	4,531,884	3,408,166	28,192,656	0	
06/29/22	20,252,606	4,531,884	3,408,166	28,192,656	0	
06/30/22	20,252,606	4,531,884	3,408,166	28,192,656	0	

Notes:

- 1. Operation of the expanded system began on January 16, 2015.
- 2. Totalizer readings are collected daily at 0800 at EW-01 and EW-02. In May 2018, the totalizer at MW-10D rolled over to a value greater than 10 million and the value was no longer presented on the system data tab. As a result, the totalizer reading was estimated between May 2018 and August 2019, based on the total flow in gallons recorded for the previous 24 hours. A system update was completed in August 2019 that reduced the totalizer reading for MW-10D by 10 million gallons.
- 3. Italics indicates estimated value for monthly and daily flow.

Table 2 Operational Issues for June 2022 Cytec Solvay Group Havre de Grace, Maryland

Date	Root Cause for Alarm	Response				
6/27/2022	Pipe Leak	System manually shut off due to a pipe leak at MW-10D discovered by Solvay on-site staff. Arcadis staff were onsite on July 11-12 to repair the leak. Replacement parts are needed and the system remains shut off until parts are ordered and the leak can be repaired.				

CYTEC SOLVAY GROUP PERIODIC COMPLIANCE REPORT

REPORTING MONTH/YEAR	June 2022	
TOTAL VOLUME DISCHARGED	280,172 Gallons	
supervision in accordance with a syste evaluate the information submitted. Ba or those persons directly responsible fo my knowledge and belief, true, accurate	document and all attachments were preparem designed to assure that qualified personsed on my inquiry of the person or persons rigathering the information, the information te, and complete. I am aware that there are the possibility of fine and imprisonment for	onnel properly gather and who manage the system, submitted is, to the best of re significant penalties for
 Date	Authorized Representative	



Cytec Solvay Group 1300 Revolution Street Havre de Grace, MD 21078 410.939.1910

August 12, 2022

Mr. Ken Montgomery Industrial Pretreatment Coordinator City of Havre de Grace Department of Public Works 711 Pennington Avenue Havre de Grace, Maryland 21078

Re: CYTEC SOLVAY GROUP AEROSPACE MATERIALS

Periodic Compliance Report – July 2022

Permit Number: CYT-2015-101

Dear Mr. Montgomery:

CYTEC SOLVAY GROUP (Cytec) has prepared this Periodic Compliance Report for the month of July 2022 in accordance with the conditions set forth in Cytec's Industrial User Wastewater Discharge Permit (Permit No. CYT-2015-101). This Periodic Compliance Report presents the results of all monitoring requirements and operational issues encountered during the month of July 2022. The monthly certification form is included as Attachment A.

For the month of July, the system pumped an estimated 146,055 gallons of wastewater at an estimated average flow rate of 3.27 gallons per minute to the City of Havre de Grace Wastewater Treatment Plant during active system operation. The estimated average flow rate of 3.27 gallons per minute for the month of July satisfied both permit flow limitations (maximum of 30,000 gallons per day; 30-minute maximum of 1,000 gallons).

One pH meter is presently installed in-line with the effluent discharge pipe to measure pH continuously. pH results from the effluent wastewater complied with all permit conditions for pH during the month of July and no significant deviations were noted during active operation. Table 1 presents the daily flow volumes and weekly pH readings recorded for the month of July.

As noted in the March 2022 report, the pump motor at EW-02 is faulty and currently pending replacement, dependent on when parts can be shipped from the manufacturer, and EW-02 has been shut down since March 15, 2022. On June 27, a pipe leak within the system shed from MW-10D was discovered and the system was manually shut down. Arcadis staff was onsite July 11 and 12 and identified a leaking flange. Replacement parts were ordered, and on July 15, Arcadis staff were onsite to repair the leak.

On July 7, an EW-01 transducer failure and high-level alarms were received. This alarm may occur when the transducer in the well is faulty. The alarms are currently disabled until Arcadis staff can inspect the transducer. On July 16, a P-100/P-200 drive fault alarm and on July 21, an E-stop alarm was received and the system was automatically shut down. These alarms may occur when the facility experiences a power fluctuation and requires a system reset. The system was restarted manually on July 18 after the P-100/P-200 drive fault alarms were cleared. The E-stop alarm was cleared, and the system was restarted manually

within 24 hours.

The August Compliance Report will be submitted in September 2022. Daily flow and pH will continue to be measured continuously. If the system is shut down for a period of at least 24 hours, pH results will be monitored and reported for three consecutive days to maintain compliance with permit conditions.

If you have any questions or comments, please contact me at 443-252-1093.

Sincerely, Cytec Solvay Group

Tyler Stephens HSE Manager

Enclosure

cc: Mr. Luis Pizarro, United States Environmental Protection Agency

Mr. Charles Jones, Cytec Solvay Group

Mr. Joshua Wilson, Arcadis Ms. Shwetha Sridharan, Arcadis

Table 1 Flow and pH Monitoring for July 2022 Cytec Solvay Group Havre de Grace, Maryland

Date	Cumulative Total Gallons Extracted (MW-10D)	Cumulative Total Gallons Extracted (EW-01)	Cumulative Total Gallons Extracted (EW-02)	Combined Cumulative Total Gallons Extracted	Daily Total Gallons Extracted	pН
07/01/22	20,252,606	4,531,884	3,408,166	28,192,656	0	5.14
07/02/22	20,252,606	4,531,884	3,408,166	28,192,656	0	
07/03/22	20,252,606	4,531,884	3,408,166	28,192,656	0	
07/04/22	20,252,606	4,531,884	3,408,166	28,192,656	0	
07/05/22	20,252,606	4,531,884	3,408,166	28,192,656	0	
07/06/22	20,252,606	4,531,884	3,408,166	28,192,656	0	
07/07/22	20,252,606	4,531,884	3,408,166	28,192,656	0	
07/08/22	20,252,606	4,531,884	3,408,166	28,192,656	0	5.14
07/09/22	20,252,606	4,531,884	3,408,166	28,192,656	0	
07/10/22	20,252,606	4,531,884	3,408,166	28,192,656	0	
07/11/22	20,252,606	4,531,884	3,408,166	28,192,656	0	
07/12/22	20,252,606	4,531,884	3,408,166	28,192,656	0	
07/13/22	20,252,606	4,531,884	3,408,166	28,192,656	0	
07/14/22	20,252,606	4,531,884	3,408,166	28,192,656	0	
07/15/22	20,252,606	4,531,884	3,408,166	28,192,656	6,938	6.49
07/16/22	20,258,420	4,532,976	3,408,198	28,199,594	0	5.84
07/17/22	20,258,420	4,532,976	3,408,198	28,199,594	0	5.87
07/18/22	20,258,420	4,532,976	3,408,198	28,199,594	5,550	
07/19/22	20,263,085	4,533,861	3,408,198	28,205,144	5,550	5.56
07/20/22	20,267,751	4,534,745	3,408,198	28,210,694	10,575	5.82
07/21/22	20,276,639	4,536,432	3,408,198	28,221,269	10,653	
07/22/22	20,285,593	4,538,131	3,408,198	28,231,922	10,673	5.84
07/23/22	20,294,563	4,539,834	3,408,198	28,242,595	10,673	
07/24/22	20,303,535	4,541,535	3,408,198	28,253,268	10,670	
07/25/22	20,312,506	4,543,234	3,408,198	28,263,938	10,678	
07/26/22	20,321,481	4,544,937	3,408,198	28,274,616	10,688	
07/27/22	20,330,459	4,546,647	3,408,198	28,285,304	10,679	
07/28/22	20,339,433	4,548,352	3,408,198	28,295,983	10,681	
07/29/22	20,348,408	4,550,058	3,408,198	28,306,664	10,683	5.84
07/30/22	20,357,383	4,551,766	3,408,198	28,317,347	10,680	
07/31/22	20,366,358	4,553,471	3,408,198	28,328,027	10,684	

Notes:

- 1. Operation of the expanded system began on January 16, 2015.
- 2. Totalizer readings are collected daily at 0800 at EW-01 and EW-02. In May 2018, the totalizer at MW-10D rolled over to a value greater than 10 million and the value was no longer presented on the system data tab. As a result, the totalizer reading was estimated between May 2018 and August 2019, based on the total flow in gallons recorded for the previous 24 hours. A system update was completed in August 2019 that reduced the totalizer reading for MW-10D by 10 million gallons.
- 3. Italics indicates estimated value for monthly and daily flow.

Table 2 Operational Issues for July 2022 Cytec Solvay Group Havre de Grace, Maryland

Date	Root Cause for Alarm	Response
6/27/2022- 7/15/2022	Pipe Leak	System manually shut off on 6/27 due to a pipe leak at MW-10D discovered by Solvay on-site staff. Arcadis staff on-site on July 15th to repair leaks. Replaced MW-10D flange and nipple.
7/7/2022	EW-01 Transducer Failure and High- Level Alarm	A EW-01 transducer failure alarm and high level alarm was received. This alarm could potentially be due to a faulty transducer in the well. The alarms are currently disabled until Arcadis staff can inspect the transducer.
7/16/2022	P-100/P-200 Drive Fault Alarms	A P-100 and P-200 drive fault alarm was received and the system was automatically shut down. This alarm may occur when the facility experiences a power fluctuation and requires a system reset. The alarm was cleared by Arcadis staff and the system was restarted on 7/18/2022.
7/21/2022	E-stop Alarm	An E-stop alarm was received and the system was automatically shut down. This alarm may occur when the facility experiences a power fluctuation and requires a system reset. The alarm was cleared by on-site personnel and the system was restarted within 24 hours.

CYTEC SOLVAY GROUP PERIODIC COMPLIANCE REPORT

REPORTING MONTH/YEAR	July 2022	
TOTAL VOLUME DISCHARGED	146,055 Gallons	
supervision in accordance with a syste evaluate the information submitted. Ba or those persons directly responsible fo my knowledge and belief, true, accura	document and all attachments were preparem designed to assure that qualified personsed on my inquiry of the person or persons or gathering the information, the information te, and complete. I am aware that there are the possibility of fine and imprisonment for	onnel properly gather and who manage the system, submitted is, to the best of re significant penalties for
 Date	Authorized Representative	



Cytec Solvay Group 1300 Revolution Street Havre de Grace, MD 21078 410.939.1910

September 8, 2022

Mr. Ken Montgomery Industrial Pretreatment Coordinator City of Havre de Grace Department of Public Works 711 Pennington Avenue Havre de Grace, Maryland 21078

Re: CYTEC SOLVAY GROUP AEROSPACE MATERIALS

Periodic Compliance Report – August 2022

Permit Number: CYT-2015-101

Dear Mr. Montgomery:

CYTEC SOLVAY GROUP (Cytec) has prepared this Periodic Compliance Report for the month of August 2022 in accordance with the conditions set forth in Cytec's Industrial User Wastewater Discharge Permit (Permit No. CYT-2015-101). This Periodic Compliance Report presents the results of all monitoring requirements and operational issues encountered during the month of August 2022. The monthly certification form is included as Attachment A.

For the month of August, the system pumped an estimated 265,693 gallons of wastewater at an estimated average flow rate of 5.95 gallons per minute to the City of Havre de Grace Wastewater Treatment Plant during active system operation. The estimated average flow rate of 5.95 gallons per minute for the month of August satisfied both permit flow limitations (maximum of 30,000 gallons per day; 30-minute maximum of 1,000 gallons).

One pH meter is presently installed in-line with the effluent discharge pipe to measure pH continuously. pH results from the effluent wastewater complied with all permit conditions for pH during the month of August and no significant deviations were noted during active operation. Table 1 presents the daily flow volumes and weekly pH readings recorded for the month of August.

As noted in the March 2022 report, the pump motor at EW-02 is faulty and currently pending replacement, dependent on when parts can be shipped from the manufacturer, and EW-02 has been shut down since March 15, 2022. Parts are expected in the next few weeks. On July 7, an EW-01 transducer failure and high-level alarms were received. This alarm may occur when the transducer in the well is faulty. Arcadis staff evaluated the transducer on August 25 and a replacement transducer is pending. On August 17, the system was automatically shut down due a suspected E-stop alarm, triggered by a power fluctuation in the facility. The system was restarted by onsite staff on August 23.

The September Compliance Report will be submitted in October 2022. Daily flow and pH will continue to be measured continuously. If the system is shut down for a period of at least 24 hours, pH results will be monitored and reported for three consecutive days to maintain compliance with permit conditions.

If you have any questions or comments, please contact me at 443-252-1093.

Sincerely, Cytec Solvay Group

Tyler Stephens HSE Manager

Enclosure

cc: Mr. Luis Pizarro, United States Environmental Protection Agency

Mr. Charles Jones, Cytec Solvay Group

Mr. Joshua Wilson, Arcadis Ms. Shwetha Sridharan, Arcadis

Table 1 Flow and pH Monitoring for August 2022 Cytec Solvay Group Havre de Grace, Maryland

Date	Cumulative Total Gallons Extracted (MW-10D)	Cumulative Total Gallons Extracted (EW-01)	Cumulative Total Gallons Extracted (EW-02)	Combined Cumulative Total Gallons Extracted	Daily Total Gallons Extracted	pН
08/01/22	20,375,334	4,555,179	3,408,198	28,338,711	10,685	
08/02/22	20,384,310	4,556,888	3,408,198	28,349,396	10,674	
08/03/22	20,393,283	4,558,589	3,408,198	28,360,070	10,679	
08/04/22	20,402,256	4,560,295	3,408,198	28,370,749	10,678	
08/05/22	20,411,229	4,562,000	3,408,198	28,381,427	10,677	5.78
08/06/22	20,420,202	4,563,704	3,408,198	28,392,104	10,676	
08/07/22	20,429,173	4,565,409	3,408,198	28,402,780	10,675	
08/08/22	20,438,145	4,567,112	3,408,198	28,413,455	10,669	
08/09/22	20,447,116	4,568,810	3,408,198	28,424,124	10,672	
08/10/22	20,456,087	4,570,511	3,408,198	28,434,796	10,676	
08/11/22	20,465,059	4,572,215	3,408,198	28,445,472	10,678	
08/12/22	20,474,032	4,573,920	3,408,198	28,456,150	10,681	5.78
08/13/22	20,483,007	4,575,626	3,408,198	28,466,831	10,686	
08/14/22	20,491,985	4,577,334	3,408,198	28,477,517	10,685	
08/15/22	20,500,961	4,579,043	3,408,198	28,488,202	10,685	
08/16/22	20,509,938	4,580,751	3,408,198	28,498,887	10,684	
08/17/22	20,518,915	4,582,458	3,408,198	28,509,571	0	
08/18/22	20,518,915	4,582,458	3,408,198	28,509,571	0	
08/19/22	20,518,915	4,582,458	3,408,198	28,509,571	0	
08/20/22	20,518,915	4,582,458	3,408,198	28,509,571	0	
08/21/22	20,518,915	4,582,458	3,408,198	28,509,571	0	
08/22/22	20,518,915	4,582,458	3,408,198	28,509,571	0	
08/23/22	20,518,915	4,582,458	3,408,198	28,509,571	9,411	6.49
08/24/22	20,526,822	4,583,962	3,408,198	28,518,982	10,681	5.82
08/25/22	20,535,798	4,585,667	3,408,198	28,529,663	10,669	5.80
08/26/22	20,544,762	4,587,372	3,408,198	28,540,332	10,678	5.80
08/27/22	20,553,736	4,589,076	3,408,198	28,551,010	10,678	
08/28/22	20,562,710	4,590,780	3,408,198	28,561,688	10,678	
08/29/22	20,571,683	4,592,485	3,408,198	28,572,366	10,672	
08/30/22	20,580,655	4,594,185	3,408,198	28,583,038	10,683	
08/31/22	20,589,630	4,595,893	3,408,198	28,593,721	10,683	

Notes:

- 1. Operation of the expanded system began on January 16, 2015.
- 2. Totalizer readings are collected daily at 0800 at EW-01 and EW-02. In May 2018, the totalizer at MW-10D rolled over to a value greater than 10 million and the value was no longer presented on the system data tab. As a result, the totalizer reading was estimated between May 2018 and August 2019, based on the total flow in gallons recorded for the previous 24 hours. A system update was completed in August 2019 that reduced the totalizer reading for MW-10D by 10 million gallons.
- 3. Italics indicates estimated value for monthly and daily flow.

Table 2 Flow and pH Monitoring for August 2022 Cytec Solvay Group Havre de Grace, Maryland

Date	Root Cause for Alarm	Response
3/15/2022 - Present	P-300 Overload Fault	The P-300 Overload alarm remains active as the motor at EW-02 has failed and needs to be replaced. Arcadis is currently waiting on a new motor to be shipped from the manufacturer. EW-02 currently remains off.
8/17/2022	E-Stop	The system was automatically shut down due to a suspected E-stop alarm, potentially triggered by a power fluctuation. Alarms were cleared and the system was restarted on 8/23.
8/25/2022		Arcadis staff were onsite to inspect the EW-01 transducer. The transducer needs to be replaced and requires staff with proper electrical training to do so. Arcadis is looking into options for replacement of the transducer.

CYTEC SOLVAY GROUP PERIODIC COMPLIANCE REPORT

REPORTING MONTH/YEAR	August 2022	
TOTAL VOLUME DISCHARGED	265,693 Gallons	
supervision in accordance with a syste evaluate the information submitted. Ba or those persons directly responsible fo my knowledge and belief, true, accurat	document and all attachments were preparem designed to assure that qualified personsed on my inquiry of the person or persons regathering the information, the information te, and complete. I am aware that there are the possibility of fine and imprisonment for	onnel properly gather and who manage the system, submitted is, to the best of re significant penalties for
 Date	Authorized Representative	



Cytec Solvay Group 1300 Revolution Street Havre de Grace, MD 21078 410.939.1910

October 17, 2022

Mr. Ken Montgomery Industrial Pretreatment Coordinator City of Havre de Grace Department of Public Works 711 Pennington Avenue Havre de Grace, Maryland 21078

Re: CYTEC SOLVAY GROUP AEROSPACE MATERIALS

Periodic Compliance Report – September 2022

Permit Number: CYT-2015-101

Dear Mr. Montgomery:

CYTEC SOLVAY GROUP (Cytec) has prepared this Periodic Compliance Report for the month of September 2022 in accordance with the conditions set forth in Cytec's Industrial User Wastewater Discharge Permit (Permit No. CYT-2015-101). This Periodic Compliance Report presents the results of all monitoring requirements and operational issues encountered during the month of September 2022. The monthly certification form is included as Attachment A.

For the month of September, the system pumped an estimated 319,666 gallons of wastewater at an estimated average flow rate of 7.40 gallons per minute to the City of Havre de Grace Wastewater Treatment Plant during active system operation. The estimated average flow rate of 7.40 gallons per minute for the month of September satisfied both permit flow limitations (maximum of 30,000 gallons per day; 30-minute maximum of 1,000 gallons).

One pH meter is presently installed in-line with the effluent discharge pipe to measure pH continuously. pH results from the effluent wastewater complied with all permit conditions for pH during the month of September and no significant deviations were noted during active operation. Table 1 presents the daily flow volumes and weekly pH readings recorded for the month of September.

As noted in previous monthly reports, the pump motor at EW-02 is faulty and currently pending replacement, dependent on replacement part availability, and EW-02 has been shut down since March 15, 2022. Parts have been shipped and will be replaced as soon as possible. On September 19, 2022 the system was automatically shut down due an E-stop alarm, triggered by a power fluctuation in the facility. The system was restarted within 24 hours by onsite staff.

The October Compliance Report will be submitted in November 2022. Daily flow and pH will continue to be measured continuously. If the system is shut down for a period of at least 24 hours, pH results will be monitored and reported for three consecutive days to maintain compliance with permit conditions.

If you have any questions or comments, please contact me at 443-252-1093.

Sincerely, Cytec Solvay Group

Tyler Stephens HSE Manager

Enclosure

Mr. Luis Pizarro, United States Environmental Protection Agency Mr. Charles Jones, Cytec Solvay Group Mr. Joshua Wilson, Arcadis cc:

Ms. Shwetha Sridharan, Arcadis

Table 1 Flow and pH Monitoring for September 2022 Cytec Solvay Group Havre de Grace, Maryland

Date	Cumulative Total Gallons Extracted (MW-10D)	Cumulative Total Gallons Extracted (EW-01)	Cumulative Total Gallons Extracted (EW-02)	Combined Cumulative Total Gallons Extracted	Daily Total Gallons Extracted	pН
09/01/22	20,598,606	4,597,600	3,408,198	28,604,404	10,682	
09/02/22	20,607,582	4,599,306	3,408,198	28,615,086	10,684	5.80
09/03/22	20,616,559	4,601,013	3,408,198	28,625,770	10,682	
09/04/22	20,625,534	4,602,720	3,408,198	28,636,452	10,679	
09/05/22	20,634,508	4,604,425	3,408,198	28,647,131	10,684	
09/06/22	20,643,482	4,606,135	3,408,198	28,657,815	10,693	
09/07/22	20,652,461	4,607,849	3,408,198	28,668,508	10,694	
09/08/22	20,661,440	4,609,564	3,408,198	28,679,202	10,693	
09/09/22	20,670,418	4,611,279	3,408,198	28,689,895	10,690	5.79
09/10/22	20,679,396	4,612,991	3,408,198	28,700,585	10,686	
09/11/22	20,688,372	4,614,701	3,408,198	28,711,271	10,693	
09/12/22	20,697,350	4,616,416	3,408,198	28,721,964	10,685	
09/13/22	20,706,326	4,618,125	3,408,198	28,732,649	10,687	
09/14/22	20,715,304	4,619,834	3,408,198	28,743,336	10,691	
09/15/22	20,724,283	4,621,546	3,408,198	28,754,027	10,698	
09/16/22	20,733,266	4,623,261	3,408,198	28,764,725	10,696	5.80
09/17/22	20,742,249	4,624,974	3,408,198	28,775,421	10,694	
09/18/22	20,751,229	4,626,688	3,408,198	28,786,115	9,696	
09/19/22	20,759,373	4,628,240	3,408,198	28,795,811	10,673	
09/20/22	20,768,348	4,629,938	3,408,198	28,806,484	10,676	
09/21/22	20,777,324	4,631,638	3,408,198	28,817,160	10,670	
09/22/22	20,786,300	4,633,332	3,408,198	28,827,830	10,684	
09/23/22	20,795,279	4,635,037	3,408,198	28,838,514	10,698	5.81
09/24/22	20,804,265	4,636,749	3,408,198	28,849,212	10,693	
09/25/22	20,813,247	4,638,460	3,408,198	28,859,905	10,692	
09/26/22	20,822,227	4,640,172	3,408,198	28,870,597	10,686	
09/27/22	20,831,205	4,641,880	3,408,198	28,881,283	10,693	
09/28/22	20,840,188	4,643,590	3,408,198	28,891,976	10,697	_
09/29/22	20,849,171	4,645,304	3,408,198	28,902,673	10,697	
09/30/22	20,858,153	4,647,019	3,408,198	28,913,370	10,700	5.80

Notes:

- 1. Operation of the expanded system began on January 16, 2015.
- 2. Totalizer readings are collected daily at 0800 at EW-01 and EW-02. In May 2018, the totalizer at MW-10D rolled over to a value greater than 10 million and the value was no longer presented on the system data tab. As a result, the totalizer reading was estimated between May 2018 and August 2019, based on the total flow in gallons recorded for the previous 24 hours. A system update was completed in August 2019 that reduced the totalizer reading for MW-10D by 10 million gallons.

Table 2 Flow and pH Monitoring for September 2022 Cytec Solvay Group Havre de Grace, Maryland

Date	Root Cause for Alarm	Response
3/15/2022 - Present	P-300 Overload Fault	The P-300 Overload alarm remains active as the motor at EW-02 has failed and needs to be replaced. Arcadis is currently waiting on a new motor to be shipped from the manufacturer. EW-02 currently remains off.
9/19/2022	E-Stop	The system was automatically shut down due to a suspected E-stop alarm, potentially triggered by a power fluctuation. Alarms were cleared and the system was restarted within 24 hours by onsite personnel.

CYTEC SOLVAY GROUP PERIODIC COMPLIANCE REPORT

REPORTING MONTH/YEAR	September 2022	
TOTAL VOLUME DISCHARGED	319,666 Gallons	
supervision in accordance with a syste evaluate the information submitted. Ba or those persons directly responsible fo my knowledge and belief, true, accurat	document and all attachments were prepared em designed to assure that qualified personn used on my inquiry of the person or persons what or gathering the information, the information sulte, and complete. I am aware that there are such the possibility of fine and imprisonment for kr	nel properly gather and no manage the system, bmitted is, to the best of significant penalties for
 Date	Authorized Representative	



Cytec Solvay Group 1300 Revolution Street Havre de Grace, MD 21078 410.939.1910

November 9, 2022

Mr. Ken Montgomery Industrial Pretreatment Coordinator City of Havre de Grace Department of Public Works 711 Pennington Avenue Havre de Grace, Maryland 21078

Re: CYTEC SOLVAY GROUP AEROSPACE MATERIALS

Periodic Compliance Report – October 2022

Permit Number: CYT-2015-101

Dear Mr. Montgomery:

CYTEC SOLVAY GROUP (Cytec) has prepared this Periodic Compliance Report for the month of October 2022 in accordance with the conditions set forth in Cytec's Industrial User Wastewater Discharge Permit (Permit No. CYT-2015-101). This Periodic Compliance Report presents the results of all monitoring requirements and operational issues encountered during the month of October 2022. The monthly certification form is included as Attachment A.

For the month of October, the system pumped an estimated 319,207 gallons of wastewater at an estimated average flow rate of 7.15 gallons per minute to the City of Havre de Grace Wastewater Treatment Plant during active system operation. The estimated average flow rate of 7.15 gallons per minute for the month of October satisfied both permit flow limitations (maximum of 30,000 gallons per day; 30-minute maximum of 1,000 gallons).

One pH meter is presently installed in-line with the effluent discharge pipe to measure pH continuously. pH results from the effluent wastewater complied with all permit conditions for pH during the month of October and no significant deviations were noted during active operation. Table 1 presents the daily flow volumes and weekly pH readings recorded for the month of October.

As noted in the March 2022 report, the pump motor at EW-02 is faulty and currently pending replacement, dependent on when parts can be shipped from the manufacturer, and EW-02 has been shut down since March 15, 2022. Parts have been shipped and will be replaced upon electrician availability. On October 5 and October 11, the system was automatically shut down due an E-stop alarm and P-100/P-200 drive fault alarms, respectively, triggered by a power fluctuation in the facility. The system was restarted within 24 hours by onsite staff on both dates.

The November Compliance Report will be submitted in December 2022. Daily flow and pH will continue to be measured continuously. If the system is shut down for a period of at least 24 hours, pH results will be monitored and reported for three consecutive days to maintain compliance with permit conditions.

If you have any questions or comments, please contact me at 443-252-1093.

Sincerely, Cytec Solvay Group

Tyler Stephens HSE Manager

Enclosure

Mr. Luis Pizarro, United States Environmental Protection Agency cc:

Mr. Charles Jones, Cytec Solvay Group Mr. Joshua Wilson, Arcadis

Ms. Shwetha Sridharan, Arcadis

Table 1 Flow and pH Monitoring for October 2022 Cytec Solvay Group Havre de Grace, Maryland

Date	Cumulative Total Gallons Extracted (MW-10D)	Cumulative Total Gallons Extracted (EW-01) Cumulative Total Gallons Extracted (EW-02)		Combined Cumulative Total Gallons Extracted	Daily Total Gallons Extracted	pН
10/01/22	20,867,138	4,648,734	3,408,198	28,924,070	10,698	
10/02/22	20,876,122	4,650,448	3,408,198	28,934,768	10,704	
10/03/22	20,885,111	4,652,163	3,408,198	28,945,472	10,709	
10/04/22	20,894,104	4,653,879	3,408,198	28,956,181	6,035	
10/05/22	20,899,174	4,654,844	3,408,198	28,962,216	6,035	
10/06/22	20,904,244	4,655,808	3,408,198	28,968,250	10,683	
10/07/22	20,913,225	4,657,510	3,408,198	28,978,933	10,683	5.81
10/08/22	20,922,204	4,659,214	3,408,198	28,989,616	10,698	
10/09/22	20,931,191	4,660,925	3,408,198	29,000,314	10,696	
10/10/22	20,940,177	4,662,635	3,408,198	29,011,010	10,016	
10/11/22	20,948,598	4,664,229	3,408,198	29,021,026	10,181	
10/12/22	20,957,160	4,665,849	3,408,198	29,031,207	10,304	
10/13/22	20,965,826	4,667,488	3,408,198	29,041,511	9,561	
10/14/22	20,973,862	4,669,012	3,408,198	29,051,072	10,679	5.81
10/15/22	20,982,844	4,670,709	3,408,198	29,061,751	10,673	
10/16/22	20,991,823	4,672,403	3,408,198	29,072,424	10,671	
10/17/22	21,000,801	4,674,096	3,408,198	29,083,095	10,677	
10/18/22	21,009,781	4,675,793	3,408,198	29,093,772	10,688	
10/19/22	21,018,765	4,677,497	3,408,198	29,104,460	10,693	
10/20/22	21,027,751	4,679,204	3,408,198	29,115,153	10,687	
10/21/22	21,036,735	4,680,907	3,408,198	29,125,840	10,686	5.83
10/22/22	21,045,718	4,682,610	3,408,198	29,136,526	10,683	
10/23/22	21,054,700	4,684,311	3,408,198	29,147,209	10,672	
10/24/22	21,063,680	4,686,003	3,408,198	29,157,881	10,672	
10/25/22	21,072,660	4,687,695	3,408,198	29,168,553	10,669	
10/26/22	21,081,637	4,689,387	3,408,198	29,179,222	10,669	
10/27/22	21,090,615	4,691,078	3,408,198	29,189,891	10,674	
10/28/22	21,099,596	4,692,771	3,408,198	29,200,565	10,677	
10/29/22	21,108,578	4,694,466	3,408,198	29,211,242	10,685	5.83
10/30/22	21,117,561	4,696,168	3,408,198	29,221,927	10,680	
10/31/22	21,126,542	4,697,867	3,408,198	29,232,607	10,670	

Notes:

- 1. Operation of the expanded system began on January 16, 2015.
- 2. Totalizer readings are collected daily at 0800 at EW-01 and EW-02. In May 2018, the totalizer at MW-10D rolled over to a value greater than 10 million and the value was no longer presented on the system data tab. As a result, the totalizer reading was estimated between May 2018 and August 2019, based on the total flow in gallons recorded for the previous 24 hours. A system update was completed in August 2019 that reduced the totalizer reading for MW-10D by 10 million gallons.
- 3. Italics indicates estimated value for monthly and daily flow.

Table 2 Flow and pH Monitoring for October 2022 Cytec Solvay Group Havre de Grace, Maryland

Date	Root Cause for Alarm	Response
3/15/2022 - Present	P-300 Overload Fault	The P-300 Overload alarm remains active as the motor at EW-02 has failed and needs to be replaced. EW-02 currently remains off.
10/5/2022	E-Stop	The system was automatically shut down due to an E-stop alarm, triggered by a power fluctuation. Alarms were cleared and the system was restarted within 24 hours by onsite personnel.
10/11/2022	P-100/P-200 Drive Fault	The system was automatically shut down due to P-100/P-200 drive fault alarms, triggered by a power fluctuation. Alarms were cleared and the system was restarted within 24 hours by onsite personnel.

Attachment A

Attachment A

CYTEC SOLVAY GROUP PERIODIC COMPLIANCE REPORT

REPORTING MONTH/YEAR	October 2022	
TOTAL VOLUME DISCHARGED	319,207 Gallons	
supervision in accordance with a syste evaluate the information submitted. Bar or those persons directly responsible for my knowledge and belief, true, accurat	document and all attachments were preparem designed to assure that qualified perso sed on my inquiry of the person or persons r gathering the information, the information see, and complete. I am aware that there are the possibility of fine and imprisonment for	nnel properly gather and who manage the system, submitted is, to the best of e significant penalties for
 Date	Authorized Representative	



Cytec Solvay Group 1300 Revolution Street Havre de Grace, MD 21078 410.939.1910

December 7, 2022

Mr. Ken Montgomery Industrial Pretreatment Coordinator City of Havre de Grace Department of Public Works 711 Pennington Avenue Havre de Grace, Maryland 21078

Re: CYTEC SOLVAY GROUP AEROSPACE MATERIALS

Periodic Compliance Report – November 2022

Permit Number: CYT-2015-101

Dear Mr. Montgomery:

CYTEC SOLVAY GROUP (Cytec) has prepared this Periodic Compliance Report for the month of November 2022 in accordance with the conditions set forth in Cytec's Industrial User Wastewater Discharge Permit (Permit No. CYT-2015-101). This Periodic Compliance Report presents the results of all monitoring requirements and operational issues encountered during the month of November 2022. The monthly certification form is included as Attachment A.

For the month of November, the system pumped an estimated 277,821 gallons of wastewater at an estimated average flow rate of 6.43 gallons per minute to the City of Havre de Grace Wastewater Treatment Plant during active system operation. The estimated average flow rate of 6.43 gallons per minute for the month of November satisfied both permit flow limitations (maximum of 30,000 gallons per day; 30-minute maximum of 1,000 gallons).

One pH meter is presently installed in-line with the effluent discharge pipe to measure pH continuously. pH results from the effluent wastewater complied with all permit conditions for pH during the month of November and no significant deviations were noted during active operation. Table 1 presents the daily flow volumes and weekly pH readings recorded for the month of November.

As noted in the March 2022 report, the pump motor at EW-02 is faulty and currently pending replacement, and EW-02 has been shut down since March 15, 2022. Parts have been shipped and will be replaced upon electrician availability. On November 26, the system was automatically shut down due an E-stop alarm, triggered by a power fluctuation in the facility. The system was restarted on November 29 by onsite personnel.

The December Compliance Report will be submitted in January 2023. Daily flow and pH will continue to be measured continuously. If the system is shut down for a period of at least 24 hours, pH results will be monitored and reported for three consecutive days to maintain compliance with permit conditions.

The second semi-annual effluent grab sample for 2022 was collected from the point of discharge at the POTW on October 12, 2022. The effluent grab sample was analyzed for Priority Pollutant volatile organic compounds, semi-volatile organic compounds, metals, and cyanide. Analytical results for the effluent

groundwater samples for metals and cyanide are compared to the effluent limitations specified in Cytec's Industrial User Wastewater Discharge Permit (Permit No. CYT-2015-101). Table 3 presents the analytical results required by the Permit. As summarized in Table 3 below, no exceedances of the effluent limitations were observed. The analytical laboratory report is presented as Attachment B, including volatile organic compound and semi-volatile organic compound results.

Table 3. Analytical Data Summary

Parameter	Effluent Limitations (μg/l)	October 2022 POTW Discharge (µg/l)			
Total Arsenic	4,060	ND			
Total Cadmium	90	ND			
Total Chromium	390	ND			
Total Copper	80	ND			
Total Lead	650	3.3 J			
Total Nickel	780	6.3 J			
Total Silver	50	ND			
Total Zinc	9,300	ND			
Total Mercury	0.3	ND			
Total Cyanide	180	11			

If you have any questions or comments, please contact me at 443-252-1093.

Sincerely, Cytec Solvay Group

Tyler Stephens HSE Manager

Enclosure

cc: Mr. Luis Pizarro, United States Environmental Protection Agency

Mr. Charles Jones, Cytec Solvay Group

Mr. Joshua Wilson, Arcadis Ms. Shwetha Sridharan, Arcadis

Table 1 Flow and pH Monitoring for November 2022 Cytec Solvay Group Havre de Grace, Maryland

Date	Cumulative Total Gallons Extracted (MW-10D)	Cumulative Total Gallons Extracted (EW-01)	Cotal GallonsTotal GallonsCumulativExtractedExtractedTotal Gallon(EW-01)(EW-02)Extracted		Daily Total Gallons Extracted	pН
11/01/22	21,135,521	4,699,558	3,408,198	29,243,277	10,667	
11/02/22	21,144,497	4,701,249	3,408,198	29,253,944	10,677	
11/03/22	21,153,476	4,702,947	3,408,198	29,264,621	7,668	
11/04/22	21,159,204	4,704,887	3,408,198	29,272,289	5,963	5.56
11/05/22	21,164,931	4,705,122	3,408,198	29,278,251	10,685	
11/06/22	21,173,911	4,706,827	3,408,198	29,288,936	10,676	
11/07/22	21,182,891	4,708,523	3,408,198	29,299,612	10,690	
11/08/22	21,191,873	4,710,231	3,408,198	29,310,302	10,706	
11/09/22	21,200,865	4,711,945	3,408,198	29,321,008	10,707	
11/10/22	21,209,857	4,713,660	3,408,198	29,331,715	10,698	
11/11/22	21,218,841	4,715,374	3,408,198	29,342,413	10,693	5.83
11/12/22	21,227,822	4,717,086	3,408,198	29,353,106	10,690	
11/13/22	21,236,805	4,718,793	3,408,198	29,363,796	10,709	
11/14/22	21,245,798	4,720,509	3,408,198	29,374,505	10,710	
11/15/22	21,254,792	4,722,225	3,408,198	29,385,215	10,708	
11/16/22	21,263,785	4,723,940	3,408,198	29,395,923	10,706	
11/17/22	21,272,776	4,725,655	3,408,198	29,406,629	10,709	
11/18/22	21,281,769	4,727,371	3,408,198	29,417,338	10,710	5.83
11/19/22	21,290,763	4,729,087	3,408,198	29,428,048	10,710	
11/20/22	21,299,757	4,730,803	3,408,198	29,438,758	10,712	
11/21/22	21,308,753	4,732,519	3,408,198	29,449,470	10,713	
11/22/22	21,317,750	4,734,235	3,408,198	29,460,183	10,708	
11/23/22	21,326,743	4,735,950	3,408,198	29,470,891	10,708	
11/24/22	21,335,735	4,737,666	3,408,198	29,481,599	10,707	
11/25/22	21,344,727	4,739,381	3,408,198	29,492,306	0	
11/26/22	21,344,727	4,739,381	3,408,198	29,492,306	0	
11/27/22	21,344,727	4,739,381	3,408,198	29,492,306	0	
11/28/22	21,344,727	4,739,381	3,408,198	29,492,306	9,730	
11/29/22	21,352,898	4,740,940	3,408,198	29,502,036	8,364	6.32
11/30/22	21,359,924	4,742,278	3,408,198	29,510,400	10,698	5.82

Notes:

- 1. Operation of the expanded system began on January 16, 2015.
- 2. Totalizer readings are collected daily at 0800 at EW-01 and EW-02. In May 2018, the totalizer at MW-10D rolled over to a value greater than 10 million and the value was no longer presented on the system data tab. As a result, the totalizer reading was estimated between May 2018 and August 2019, based on the total flow in gallons recorded for the previous 24 hours. A system update was completed in August 2019 that reduced the totalizer reading for MW-10D by 10 million gallons.
- 3. Italics indicates estimated value for monthly and daily flow.

Table 2 Flow and pH Monitoring for November 2022 Cytec Solvay Group Havre de Grace, Maryland

Date	Root Cause for Alarm	Response
3/15/2022 - Present	P-300 Overload Fault	The P-300 Overload alarm remains active as the motor at EW-02 has failed and needs to be replaced. EW-02 currently remains off.
11/26/2022	E-Stop	The system was automatically shut down due to an E-stop alarm, triggered by a power fluctuation. Alarms were cleared and the system was restarted on 11/29 by onsite personnel.

Attachment A

Attachment A

CYTEC SOLVAY GROUP PERIODIC COMPLIANCE REPORT

REPORTING MONTH/YEAR	November 2022	
TOTAL VOLUME DISCHARGED	277,821 Gallons	
supervision in accordance with a syste evaluate the information submitted. Ba or those persons directly responsible fo my knowledge and belief, true, accura	document and all attachments were preparem designed to assure that qualified personsed on my inquiry of the person or persons or gathering the information, the information ste, and complete. I am aware that there are the possibility of fine and imprisonment for	nnel properly gather and who manage the system, submitted is, to the best of e significant penalties for
 Date	Authorized Representative	

Attachment B



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Environment Testing

ANALYTICAL REPORT

Eurofins Pittsburgh 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 Tel: (412)963-7058

Laboratory Job ID: 180-146141-1

Client Project/Site: Cytec Havre de Grace MD

For:

ARCADIS U.S., Inc. 7550 Teague Road Suite 210 Hanover, Maryland 21076

Attn: Ms. Shwetha Sridharan



Authorized for release by: 11/3/2022 3:48:54 PM

Jill Colussy, Project Manager I (412)963-2444

Jill.Colussy@et.eurofinsus.com

.....LINKS

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www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

PA Lab ID: 02-00416

Client: ARCADIS U.S., Inc. Project/Site: Cytec Havre de Grace MD Laboratory Job ID: 180-146141-1

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Case Narrative

Client: ARCADIS U.S., Inc.

Job ID: 180-146141-1 Project/Site: Cytec Havre de Grace MD

Job ID: 180-146141-1

Laboratory: Eurofins Pittsburgh

Narrative

Job Narrative 180-146141-1

Receipt

The samples were received on 10/13/2022 10:40 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.2° C.

The laboratory did not receive the TRIP BLANK listed on the chain of custody.

GC/MS VOA

The preservative used in the sample containers provided is not compatible with the Method 624 analytes requested. The following sample was received preserved with hydrochloric acid: POTWOUTFALL (101222) (180-146141-1). The requested target analyte list contains 2-Chloroethyl vinyl ether and/or Acrolein, which are acid-labile compounds that degrade in an acidic medium.

Due to the concentration of target compounds detected, sample POTWOUTFALL (101222) (180-146141-1) was analyzed at a dilution. Elevated reporting limits (RLs) are provided.

The laboratory control sample (LCS) for batch 180-415073 recovered outside control limits for 1,1,2,2-Tetrachloroethane, 1,1-Dichloroethane and 1,1-Dichloroethene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

GC/MS Semi VOA

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

The associated samples are included in 11 analyses between CCV/CCB. The bracketing QC was within the control limits. Data will be reported as is with this narrative.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 180-146141-1

Project/Site: Cytec Havre de Grace MD

Qualifiers

GC/MS VOA

Qualifier Qualifier Description

*+ LCS and/or LCSD is outside acceptance limits, high biased.

GC/MS Semi VOA

Qualifier Qualifier Description

F1 MS and/or MSD recovery exceeds control limits.

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier Qualifier Description

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery
CFL Contains Free Liquid
CFU Colony Forming Unit
CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit
ML Minimum Level (Dioxin)
MPN Most Probable Number
MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive
QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin)
TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

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Accreditation/Certification Summary

Client: ARCADIS U.S., Inc.

Job ID: 180-146141-1

Project/Site: Cytec Havre de Grace MD

Laboratory: Eurofins Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date	
rkansas DEQ State		19-033-0	06-27-22 *	
California	State	2891	04-30-23	
Connecticut	State	PH-0688	09-30-22 *	
Florida	NELAP	E871008	06-30-23	
Georgia	State	PA 02-00416	04-30-23	
Illinois	NELAP	004375	06-30-23	
Kansas	NELAP	E-10350	03-31-23	
Kentucky (UST)	State	162013	04-30-23	
Kentucky (WW)	State	KY98043	12-31-22	
Louisiana	NELAP	04041	06-30-22 *	
Louisiana (All)	NELAP	04041	06-30-23	
Maine	State	PA00164	03-06-24	
Minnesota	NELAP	042-999-482	12-31-22	
New Hampshire	NELAP	2030	04-04-23	
New Jersey	NELAP	PA005	06-30-23	
New York	NELAP	11182	04-01-23	
North Carolina (WW/SW)	State	434	12-31-22	
North Dakota	State	R-227	04-30-23	
Oregon	NELAP	PA-2151	02-07-23	
Pennsylvania	NELAP	02-00416	04-30-23	
Rhode Island	State	LAO00362	12-31-22	
South Carolina	State	89014	04-20-23	
Texas	NELAP	T104704528	03-31-23	
JSDA	US Federal Programs	P330-16-00211	06-21-24	
Utah	NELAP	PA001462019-8	05-31-23	
√irginia	NELAP	10043	10-31-22	
West Virginia DEP	State	142	01-31-23	
Wisconsin	State	998027800	08-31-23	

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 $^{^{\}star}\,\text{Accreditation/Certification renewal pending - accreditation/certification considered valid}.$

Eurofins Pittsburgh

Sample Summary

Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Job ID: 180-146141-1

 Lab Sample ID
 Client Sample ID
 Matrix
 Collected
 Received

 180-146141-1
 POTWOUTFALL (101222)
 Water
 10/12/22 10:30
 10/13/22 10:40

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Method Summary

Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Method **Method Description** Protocol Laboratory EPA 624.1 Volatile Organic Compounds (GC/MS) 40CFR136A **EET PIT** 40 CFR 761 EPA 625.1 Semivolatile Organic Compounds (GC/MS) **EET PIT** EPA 200.7 Rev 4 Metals (ICP) **EPA EET PIT** EPA 245.1 Rev. Mercury (CVAA) EPA **EET PIT** SM 4500CN E Total Cyanide SM **EET PIT** 200.7 Preparation, Total Recoverable Metals EPA **EET PIT** Preparation, Mercury 245.1 EPA EET PIT 625 Liquid-Liquid Extraction 40CFR136A **EET PIT** SM 4500 CN C Cyanide, Distillation SM **EET PIT**

Protocol References:

40 CFR 761 = Toxic Substances Control Act (TSCA)

40CFR136A = "Methods for Organic Chemical Analysis of Municipal Industrial Wastewater", 40CFR, Part 136, Appendix A, October 26, 1984 and subsequent revisions.

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Job ID: 180-146141-1

Lab Chronicle

Client: ARCADIS U.S., Inc. Job ID: 180-146141-1

Project/Site: Cytec Havre de Grace MD

Client Sample ID: POTWOUTFALL (101222)

Lab Sample ID: 180-146141-1 Date Collected: 10/12/22 10:30 **Matrix: Water**

Date Received: 10/13/22 10:40

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumer	EPA 624.1 nt ID: CHHP6		2	5 mL	5 mL	415073	10/14/22 15:18	J1T	EET PIT
Total/NA	Prep	625			250 mL	250 uL	415298	10/17/22 11:51	BJT	EET PIT
Total/NA	Analysis Instrumer	EPA 625.1 nt ID: CH71		1	1 mL	1 mL	415666	10/20/22 16:33	VVP	EET PIT
Total Recoverable	Prep	200.7			25 mL	25 mL	416128	10/25/22 11:45	HCY	EET PIT
Total Recoverable	Analysis Instrumer	EPA 200.7 Rev 4 at ID: C		1			416359	10/27/22 02:56	RJG	EET PIT
Total/NA	Prep	245.1			25 mL	25 mL	416511	10/28/22 06:47	RJR	EET PIT
Total/NA	Analysis Instrumer	EPA 245.1 Rev. at ID: HGY		1			416617	10/28/22 14:13	RJR	EET PIT
Total/NA	Prep	SM 4500 CN C			6 mL	6 mL	416138	10/25/22 13:45	CMR	EET PIT
Total/NA	Analysis Instrumer	SM 4500CN E at ID: SEAL1		1			416228	10/25/22 16:54	CMR	EET PIT

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Analyst References:

Lab: EET PIT

Batch Type: Prep

BJT = Bill Trout

CMR = Carl Reagle

HCY = Harrison Yaeger

RJR = Ron Rosenbaum

Batch Type: Analysis

CMR = Carl Reagle

J1T = Jianwu Tang

RJG = Rob Good

RJR = Ron Rosenbaum

VVP = Vincent Piccolino

Eurofins Pittsburgh

11/3/2022

Client Sample ID: POTWOUTFALL (101222)

Date Collected: 10/12/22 10:30 Date Received: 10/13/22 10:40 Lab Sample ID: 180-146141-1

Matrix: Water

Analyte	Result	Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.0	1.2	ug/L			10/14/22 15:18	2
1,1,2,2-Tetrachloroethane	ND	*+	2.0	1.2	ug/L			10/14/22 15:18	2
1,1,2-Trichloroethane	ND		2.0	0.91	ug/L			10/14/22 15:18	2
1,1-Dichloroethane	ND	*+	2.0	0.61	ug/L			10/14/22 15:18	2
1,1-Dichloroethene	ND	*+	2.0	1.1	ug/L			10/14/22 15:18	2
1,2-Dichloroethane	63		2.0	1.1	ug/L			10/14/22 15:18	2
1,2-Dichloropropane	ND		2.0	1.3	ug/L			10/14/22 15:18	2
1,2-Dichlorobenzene	ND		2.0	0.73	ug/L			10/14/22 15:18	2
1,3-Dichlorobenzene	ND		2.0	1.0	ug/L			10/14/22 15:18	2
1,4-Dichlorobenzene	ND		2.0	1.1	ug/L			10/14/22 15:18	2
2-Chloroethyl vinyl ether	ND		4.0	3.4	ug/L			10/14/22 15:18	2
Acrolein	ND		40	32	ug/L			10/14/22 15:18	2
Acrylonitrile	ND		40	16	ug/L			10/14/22 15:18	2
Benzene	ND		2.0	1.2	ug/L			10/14/22 15:18	2
Bromoform	ND		2.0	2.0	ug/L			10/14/22 15:18	2
Bromomethane	ND		2.0	1.8	ug/L			10/14/22 15:18	2
Carbon tetrachloride	ND		2.0	1.8	ug/L			10/14/22 15:18	2
Chlorobenzene	ND		2.0	1.0	ug/L			10/14/22 15:18	2
Chloroform	ND		2.0	1.2	ug/L			10/14/22 15:18	2
Chloromethane	ND		2.0	1.8	ug/L			10/14/22 15:18	2
cis-1,3-Dichloropropene	ND		2.0	1.2	ug/L			10/14/22 15:18	2
Ethylbenzene	ND		2.0	1.0	ug/L			10/14/22 15:18	2
Methylene Chloride	ND		2.0	1.8	ug/L			10/14/22 15:18	2
Tetrachloroethene	ND		2.0	0.93	ug/L			10/14/22 15:18	2
Toluene	ND		2.0	0.91	ug/L			10/14/22 15:18	2
trans-1,2-Dichloroethene	3.4		2.0	1.3	ug/L			10/14/22 15:18	2
trans-1,3-Dichloropropene	ND		2.0	1.2	ug/L			10/14/22 15:18	2
Trichloroethene	4.4		2.0	1.4	ug/L			10/14/22 15:18	2
Vinyl chloride	10		2.0	0.80	ug/L			10/14/22 15:18	2
Dibromochloromethane	ND		2.0	1.7	ug/L			10/14/22 15:18	2
Bromodichloromethane	ND		2.0	1.3	ug/L			10/14/22 15:18	2
Chloroethane	ND		2.0	1.8	ug/L			10/14/22 15:18	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		28 - 163			=		10/14/22 15:18	2
4-Bromofluorobenzene (Surr)	61		41 - 122					10/14/22 15:18	2
Toluene-d8 (Surr)	99		53 - 125					10/14/22 15:18	2
Dibromofluoromethane (Surr)	118		59 - 168					10/14/22 15:18	2

Analyte	Result Q	ualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	ND ND		0.19	0.065	ug/L		10/17/22 11:51	10/20/22 16:33	1
Acenaphthene	ND		0.19	0.065	ug/L		10/17/22 11:51	10/20/22 16:33	1
Anthracene	ND		0.19	0.049	ug/L		10/17/22 11:51	10/20/22 16:33	1
Benzidine	ND F1	1	20	9.1	ug/L		10/17/22 11:51	10/20/22 16:33	1
Benzo[a]anthracene	ND		0.19	0.075	ug/L		10/17/22 11:51	10/20/22 16:33	1
Benzo[b]fluoranthene	ND		0.19	0.097	ug/L		10/17/22 11:51	10/20/22 16:33	1
Benzo[k]fluoranthene	ND		0.19	0.088	ug/L		10/17/22 11:51	10/20/22 16:33	1
Benzo[g,h,i]perylene	ND		0.19	0.069	ug/L		10/17/22 11:51	10/20/22 16:33	1
Benzo[a]pyrene	ND		0.19	0.053	ug/L		10/17/22 11:51	10/20/22 16:33	1

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Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 180-146141-1

Project/Site: Cytec Havre de Grace MD

Client Sample ID: POTWOUTFALL (101222)

Lab Sample ID: 180-146141-1 Date Collected: 10/12/22 10:30 **Matrix: Water**

Date Received: 10/13/22 10:40

2-Fluorophenol

Method: 40 CFR 761 EPA 625.1 - Semivolatile	Organic Compounds (GC/MS) (Continued)
---	---------------------------------------

Analyte	Result	Qualifier	RL	MDL		D Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	ND		0.19	0.040	ug/L	10/17/22 11:51	10/20/22 16:33	1
Bis(2-ethylhexyl) phthalate	ND		10	6.2	ug/L	10/17/22 11:51	10/20/22 16:33	1
4-Bromophenyl phenyl ether	ND		1.0	0.32	ug/L	10/17/22 11:51	10/20/22 16:33	1
Butyl benzyl phthalate	ND		1.0	0.46	ug/L	10/17/22 11:51	10/20/22 16:33	1
4-Chloro-3-methylphenol	ND		1.0	0.28	ug/L	10/17/22 11:51	10/20/22 16:33	1
2-Chloronaphthalene	ND	F1	0.19	0.059	ug/L	10/17/22 11:51	10/20/22 16:33	1
2-Chlorophenol	ND		1.0	0.13	ug/L	10/17/22 11:51	10/20/22 16:33	1
Chrysene	ND		0.19	0.081	ug/L	10/17/22 11:51	10/20/22 16:33	1
Dibenzo(a,h)-anthracene	ND		0.19	0.072	ug/L	10/17/22 11:51	10/20/22 16:33	1
Di-n-butyl phthalate	ND		1.0	0.74	ug/L	10/17/22 11:51	10/20/22 16:33	1
3,3'-Dichlorobenzidine	ND		1.0	0.58	ug/L	10/17/22 11:51	10/20/22 16:33	1
2,4-Dichlorophenol	ND		0.19	0.051	ug/L	10/17/22 11:51	10/20/22 16:33	1
Diethyl phthalate	ND		1.0	0.57	ug/L	10/17/22 11:51	10/20/22 16:33	1
2,4-Dimethylphenol	ND		1.0	0.17	ug/L	10/17/22 11:51	10/20/22 16:33	1
Dimethyl phthalate	ND		1.0	0.20	-	10/17/22 11:51	10/20/22 16:33	1
4,6-Dinitro-2-methylphenol	ND		5.0		ug/L		10/20/22 16:33	1
2,4-Dinitrophenol	ND		10		ug/L	10/17/22 11:51	10/20/22 16:33	1
2,4-Dinitrotoluene	ND		1.0	0.35	-		10/20/22 16:33	1
2,6-Dinitrotoluene	ND		1.0	0.17		10/17/22 11:51	10/20/22 16:33	1
Di-n-octyl phthalate	ND		1.0	0.69	•	10/17/22 11:51	10/20/22 16:33	1
Fluoranthene	ND		0.19	0.060	•		10/20/22 16:33	1
Fluorene	ND		0.19	0.069			10/20/22 16:33	1
Hexachlorobenzene	ND		0.19	0.056	-		10/20/22 16:33	1
Hexachlorobutadiene	ND		0.19	0.069	ū		10/20/22 16:33	1
Hexachlorocyclopentadiene	ND		1.0	0.50			10/20/22 16:33	· 1
Hexachloroethane	ND		1.0	0.13	_		10/20/22 16:33	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.085	-		10/20/22 16:33	1
Isophorone	ND		1.0	0.19			10/20/22 16:33	
Naphthalene	ND		0.19	0.059	ug/L		10/20/22 16:33	1
Nitrobenzene	ND		2.0	0.50	-		10/20/22 16:33	1
2-Nitrophenol	ND		1.0	0.19			10/20/22 16:33	· · · · · · · 1
4-Nitrophenol	ND		5.0	0.94	-		10/20/22 16:33	1
N-Nitrosodimethylamine	ND		1.0	0.067	•		10/20/22 16:33	1
N-Nitrosodiphenylamine	ND		1.0	0.12			10/20/22 16:33	· · · · · · · · · · · · · · · · · · ·
N-Nitrosodi-n-propylamine	ND.		0.19	0.071	-		10/20/22 16:33	1
2,2'-oxybis[1-chloropropane]	ND		0.19	0.058	-		10/20/22 16:33	1
Pentachlorophenol	ND		5.0	0.036			10/20/22 16:33	
Phenanthrene					•			•
Phenol	ND ND		0.19 1.0	0.055 0.49	•		10/20/22 16:33 10/20/22 16:33	1
	ND		0.19	0.49			10/20/22 16:33	1 1
Pyrene 1,2,4-Trichlorobenzene	ND ND		1.0				10/20/22 16:33	
				0.13	-			1
2,4,6-Trichlorophenol	ND		1.0	0.22			10/20/22 16:33	1
Bis(2-chloroethoxy)methane	ND		1.0	0.15	-		10/20/22 16:33	1
4-Chlorophenyl phenyl ether	ND	E4	1.0	0.22	-		10/20/22 16:33 10/20/22 16:33	1
1,2-Diphenylhydrazine(as Azobenzene)	ND	ГІ	1.0	0.20	ug/L	10/17/22 11:51	10/20/22 10:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	77		47 - 107			10/17/22 11:51	10/20/22 16:33	1

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10/17/22 11:51 10/20/22 16:33

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Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 180-146141-1

Project/Site: Cytec Havre de Grace MD

Client Sample ID: POTWOUTFALL (101222)

Date Collected: 10/12/22 10:30

Date Received: 10/13/22 10:40

Lab Sample ID: 180-146141-1 **Matrix: Water**

Method: 40 CFR 761	EPA 625.1	- Semivolatile	Organic	Compounds	(GC/MS)	(Continued)

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	82	32 - 127	10/17/22 11:51	10/20/22 16:33	1
Nitrobenzene-d5	79	47 - 110	10/17/22 11:51	10/20/22 16:33	1
Phenol-d5	75	37 - 110	10/17/22 11:51	10/20/22 16:33	1
Terphenyl-d14	86	32 - 115	10/17/22 11:51	10/20/22 16:33	1

Method: EF	PA 200.7 Rev 4	Metals (ICP)	- Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10	5.7	ug/L		10/25/22 11:45	10/27/22 02:56	1
Cadmium	ND		5.0	0.33	ug/L		10/25/22 11:45	10/27/22 02:56	1
Chromium	ND		5.0	2.6	ug/L		10/25/22 11:45	10/27/22 02:56	1
Copper	ND		25	3.9	ug/L		10/25/22 11:45	10/27/22 02:56	1
Lead	3.3	J	10	2.3	ug/L		10/25/22 11:45	10/27/22 02:56	1
Nickel	6.3	J	40	2.1	ug/L		10/25/22 11:45	10/27/22 02:56	1
Silver	ND		5.0	0.87	ug/L		10/25/22 11:45	10/27/22 02:56	1
Zinc	ND		20	3.3	ug/L		10/25/22 11:45	10/27/22 02:56	1

Method:	EPA 245.1	Rev N	Mercury ((CVAA)
---------	------------------	-------	-----------	--------

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	0.20	0.13 ug/L		10/28/22 06:47	10/28/22 14:13	1

General Chemistry

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SM 4500CN E)	0.011	0.010	0.0080 mg/L		10/25/22 13:45	10/25/22 16:54	1

11/3/2022

Client: ARCADIS U.S., Inc.

Job ID: 180-146141-1 Project/Site: Cytec Havre de Grace MD

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 180-415073/7

Matrix: Water

Analysis Batch: 415073

Client Sample ID: Method Blank Prep Type: Total/NA

MB MB Result Qualifier RL **MDL** Unit Dil Fac Analyte D Prepared Analyzed 1,1,1-Trichloroethane ND 1.0 0.60 ug/L 10/14/22 13:32 1,1,2,2-Tetrachloroethane ND 1.0 0.60 ug/L 10/14/22 13:32 1,1,2-Trichloroethane ND 1.0 0.45 ug/L 10/14/22 13:32 1,1-Dichloroethane ND 1.0 0.31 ug/L 10/14/22 13:32 1,1-Dichloroethene ND 1.0 0.55 ug/L 10/14/22 13:32 ND 0.57 ug/L 1,2-Dichloroethane 1.0 10/14/22 13:32 ND 10/14/22 13:32 1,2-Dichloropropane 1.0 0.66 ug/L 1,2-Dichlorobenzene ND 1.0 0.36 ug/L 10/14/22 13:32 1,3-Dichlorobenzene ND 1.0 0.50 ug/L 10/14/22 13:32 1,4-Dichlorobenzene ND 1.0 0.54 ug/L 10/14/22 13:32 ND 2-Chloroethyl vinyl ether 2.0 1.7 ug/L 10/14/22 13:32 Acrolein ND 20 16 ug/L 10/14/22 13:32 Acrylonitrile ND 20 7.8 ug/L 10/14/22 13:32 Benzene ND 1.0 0.60 ug/L 10/14/22 13:32 Bromoform ND 1.0 0.98 ug/L 10/14/22 13:32 Bromomethane ND 0.89 ug/L 1.0 10/14/22 13:32 Carbon tetrachloride ND 1.0 0.88 ug/L 10/14/22 13:32 0.50 ug/L 10/14/22 13:32 Chlorobenzene ND 1.0 Chloroform ND 1.0 0.60 ug/L 10/14/22 13:32 Chloromethane ND 1.0 0.90 ug/L 10/14/22 13:32 cis-1,3-Dichloropropene 1.0 0.59 ug/L 10/14/22 13:32 ND ND Ethylbenzene 1.0 0.51 ug/L 10/14/22 13:32 Methylene Chloride ND 1.0 0.89 ug/L 10/14/22 13:32 Tetrachloroethene ND 1.0 10/14/22 13:32 0.47 ug/L Toluene ND 1.0 0.46 ug/L 10/14/22 13:32 trans-1.2-Dichloroethene ND 1.0 0.67 ug/L 10/14/22 13:32 trans-1,3-Dichloropropene ND 1.0 0.58 ug/L 10/14/22 13:32 Trichloroethene ND 1.0 0.69 ug/L 10/14/22 13:32

MB MB

ND

ND

ND

ND

	Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	1,2-Dichloroethane-d4 (Surr)	96		28 - 163		10/14/22 13:32	1
	4-Bromofluorobenzene (Surr)	108		41 - 122	1	10/14/22 13:32	1
	Toluene-d8 (Surr)	122		53 - 125	1	10/14/22 13:32	1
١	Dibromofluoromethane (Surr)	118		59 - 168	1	10/14/22 13:32	1

1.0

1.0

1.0

1.0

0.40 ug/L

0.84 ug/L

0.64 ug/L

0.90 ug/L

Lab Sample ID: LCS 180-415073/5

Matrix: Water

Vinyl chloride

Chloroethane

Dibromochloromethane

Bromodichloromethane

Analysis Batch: 415073

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1,1-Trichloroethane	10.0	9.99		ug/L		100	70 - 130	
1,1,2,2-Tetrachloroethane	10.0	16.1	*+	ug/L		161	60 - 140	
1,1,2-Trichloroethane	10.0	10.1		ug/L		101	70 - 130	
1,1-Dichloroethane	10.0	15.3	*+	ug/L		153	70 - 130	

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Prep Type: Total/NA

10/14/22 13:32

10/14/22 13:32

10/14/22 13:32

10/14/22 13:32

Client Sample ID: Lab Control Sample

Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Method: EPA 624.1 - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-415073/5

Matrix: Water

Analysis Batch: 415073

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Job ID: 180-146141-1

	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
1,1-Dichloroethene	10.0	16.5	*+	ug/L		165	50 - 150
1,2-Dichloroethane	10.0	7.86		ug/L		79	70 - 130
1,2-Dichloropropane	10.0	11.9		ug/L		119	35 - 165
1,2-Dichlorobenzene	10.0	9.05		ug/L		91	65 - 135
1,3-Dichlorobenzene	10.0	8.72		ug/L		87	70 - 130
1,4-Dichlorobenzene	10.0	9.03		ug/L		90	65 - 135
2-Chloroethyl vinyl ether	20.0	15.5		ug/L		77	10 - 170
Acrolein	30.0	29.4		ug/L		98	60 - 140
Acrylonitrile	100	137		ug/L		137	60 - 140
Benzene	10.0	10.1		ug/L		101	65 - 135
Bromoform	10.0	10.6		ug/L		106	70 - 130
Bromomethane	10.0	6.23		ug/L		62	15 - 170
Carbon tetrachloride	10.0	11.3		ug/L		113	70 - 130
Chlorobenzene	10.0	8.22		ug/L		82	65 - 135
Chloroform	10.0	9.67		ug/L		97	70 - 135
Chloromethane	10.0	15.6		ug/L		156	10 - 170
cis-1,3-Dichloropropene	10.0	8.32		ug/L		83	25 - 170
Ethylbenzene	10.0	9.00		ug/L		90	60 - 140
Methylene Chloride	10.0	13.8		ug/L		138	60 - 140
Tetrachloroethene	10.0	9.78		ug/L		98	70 - 130
Toluene	10.0	12.2		ug/L		122	70 - 130
trans-1,2-Dichloroethene	10.0	12.9		ug/L		129	70 - 130
trans-1,3-Dichloropropene	10.0	8.78		ug/L		88	50 - 150
Trichloroethene	10.0	8.52		ug/L		85	65 - 135
Vinyl chloride	10.0	14.4		ug/L		144	10 - 170
Dibromochloromethane	10.0	10.0		ug/L		100	70 - 135
Bromodichloromethane	10.0	8.93		ug/L		89	65 - 135
Chloroethane	10.0	8.18		ug/L		82	40 - 160

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	72		28 - 163
4-Bromofluorobenzene (Surr)	94		41 - 122
Toluene-d8 (Surr)	116		53 - 125
Dibromofluoromethane (Surr)	96		59 - 168

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 180-415298/1-A

Matrix: Water

Analysis Batch: 415666

Client Sample ID: Method Blank Prep Type: Total/NA **Prep Batch: 415298**

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	ND		0.19	0.065	ug/L		10/17/22 11:51	10/20/22 15:50	1
Acenaphthene	ND		0.19	0.065	ug/L		10/17/22 11:51	10/20/22 15:50	1
Anthracene	ND		0.19	0.049	ug/L		10/17/22 11:51	10/20/22 15:50	1
Benzidine	ND		20	9.1	ug/L		10/17/22 11:51	10/20/22 15:50	1
Benzo[a]anthracene	ND		0.19	0.075	ug/L		10/17/22 11:51	10/20/22 15:50	1
Benzo[b]fluoranthene	ND		0.19	0.097	ug/L		10/17/22 11:51	10/20/22 15:50	1
Benzo[k]fluoranthene	ND		0.19	0.088	ug/L		10/17/22 11:51	10/20/22 15:50	1

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Client: ARCADIS U.S., Inc. Job ID: 180-146141-1

Project/Site: Cytec Havre de Grace MD

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-415298/1-A

Matrix: Water

Azobenzene)

Analysis Batch: 415666

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 415298

-	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND		0.19	0.069	ug/L		10/17/22 11:51	10/20/22 15:50	1
Benzo[a]pyrene	ND		0.19	0.053	ug/L		10/17/22 11:51	10/20/22 15:50	1
Bis(2-chloroethyl)ether	ND		0.19	0.040	ug/L		10/17/22 11:51	10/20/22 15:50	1
Bis(2-ethylhexyl) phthalate	ND		10	6.2	ug/L		10/17/22 11:51	10/20/22 15:50	1
4-Bromophenyl phenyl ether	ND		1.0	0.32	ug/L		10/17/22 11:51	10/20/22 15:50	1
Butyl benzyl phthalate	ND		1.0	0.46	ug/L		10/17/22 11:51	10/20/22 15:50	1
4-Chloro-3-methylphenol	ND		1.0	0.28	ug/L		10/17/22 11:51	10/20/22 15:50	1
2-Chloronaphthalene	ND		0.19	0.059	ug/L		10/17/22 11:51	10/20/22 15:50	1
2-Chlorophenol	ND		1.0	0.13	ug/L		10/17/22 11:51	10/20/22 15:50	1
Chrysene	ND		0.19	0.081	ug/L		10/17/22 11:51	10/20/22 15:50	1
Dibenzo(a,h)-anthracene	ND		0.19	0.072	ug/L		10/17/22 11:51	10/20/22 15:50	1
Di-n-butyl phthalate	ND		1.0	0.74	ug/L		10/17/22 11:51	10/20/22 15:50	1
3,3'-Dichlorobenzidine	ND		1.0	0.58	ug/L		10/17/22 11:51	10/20/22 15:50	1
2,4-Dichlorophenol	ND		0.19	0.051	ug/L		10/17/22 11:51	10/20/22 15:50	1
Diethyl phthalate	ND		1.0	0.57	ug/L		10/17/22 11:51	10/20/22 15:50	1
2,4-Dimethylphenol	ND		1.0	0.17	ug/L		10/17/22 11:51	10/20/22 15:50	1
Dimethyl phthalate	ND		1.0	0.20	ug/L		10/17/22 11:51	10/20/22 15:50	1
4,6-Dinitro-2-methylphenol	ND		5.0	1.5	ug/L		10/17/22 11:51	10/20/22 15:50	1
2,4-Dinitrophenol	ND		10	1.5	ug/L		10/17/22 11:51	10/20/22 15:50	1
2,4-Dinitrotoluene	ND		1.0	0.35	ug/L		10/17/22 11:51	10/20/22 15:50	1
2,6-Dinitrotoluene	ND		1.0	0.17	ug/L		10/17/22 11:51	10/20/22 15:50	1
Di-n-octyl phthalate	ND		1.0	0.69	ug/L		10/17/22 11:51	10/20/22 15:50	1
Fluoranthene	ND		0.19	0.060	ug/L		10/17/22 11:51	10/20/22 15:50	1
Fluorene	ND		0.19	0.069	ug/L		10/17/22 11:51	10/20/22 15:50	1
Hexachlorobenzene	ND		0.19	0.056	ug/L		10/17/22 11:51	10/20/22 15:50	1
Hexachlorobutadiene	ND		0.19	0.069	ug/L		10/17/22 11:51	10/20/22 15:50	1
Hexachlorocyclopentadiene	ND		1.0	0.50	ug/L		10/17/22 11:51	10/20/22 15:50	1
Hexachloroethane	ND		1.0	0.13	ug/L		10/17/22 11:51	10/20/22 15:50	1
Indeno[1,2,3-cd]pyrene	ND		0.19	0.085	ug/L		10/17/22 11:51	10/20/22 15:50	1
Isophorone	ND		1.0	0.19	ug/L		10/17/22 11:51	10/20/22 15:50	1
Naphthalene	ND		0.19	0.059	ug/L		10/17/22 11:51	10/20/22 15:50	1
Nitrobenzene	ND		2.0	0.50	ug/L		10/17/22 11:51	10/20/22 15:50	1
2-Nitrophenol	ND		1.0	0.19	ug/L		10/17/22 11:51	10/20/22 15:50	1
4-Nitrophenol	ND		5.0	0.94	ug/L		10/17/22 11:51	10/20/22 15:50	1
N-Nitrosodimethylamine	ND		1.0	0.067	ug/L		10/17/22 11:51	10/20/22 15:50	1
N-Nitrosodiphenylamine	ND		1.0	0.12	ug/L		10/17/22 11:51	10/20/22 15:50	1
N-Nitrosodi-n-propylamine	ND		0.19	0.071	ug/L		10/17/22 11:51	10/20/22 15:50	1
2,2'-oxybis[1-chloropropane]	ND		0.19	0.058	ug/L		10/17/22 11:51	10/20/22 15:50	1
Pentachlorophenol	ND		5.0	0.85	ug/L		10/17/22 11:51	10/20/22 15:50	1
Phenanthrene	ND		0.19	0.055	ug/L		10/17/22 11:51	10/20/22 15:50	1
Phenol	ND		1.0	0.49	ug/L		10/17/22 11:51	10/20/22 15:50	1
Pyrene	ND		0.19	0.054			10/17/22 11:51	10/20/22 15:50	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L		10/17/22 11:51	10/20/22 15:50	1
2,4,6-Trichlorophenol	ND		1.0	0.22	ug/L		10/17/22 11:51	10/20/22 15:50	1
Bis(2-chloroethoxy)methane	ND		1.0	0.15			10/17/22 11:51	10/20/22 15:50	1
4-Chlorophenyl phenyl ether	ND		1.0	0.22			10/17/22 11:51	10/20/22 15:50	1
1,2-Diphenylhydrazine(as	ND		1.0	0.20	-		10/17/22 11:51	10/20/22 15:50	1
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Client: ARCADIS U.S., Inc. Job ID: 180-146141-1

Project/Site: Cytec Havre de Grace MD

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-415298/1-A

Matrix: Water

Analysis Batch: 415666

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 415298

	MB	MB				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	86		47 - 107	10/17/22 11:51	10/20/22 15:50	1
2-Fluorophenol	99		35 - 109	10/17/22 11:51	10/20/22 15:50	1
2,4,6-Tribromophenol	93		32 - 127	10/17/22 11:51	10/20/22 15:50	1
Nitrobenzene-d5	86		47 - 110	10/17/22 11:51	10/20/22 15:50	1
Phenol-d5	95		37 - 110	10/17/22 11:51	10/20/22 15:50	1
Terphenyl-d14	99		32 - 115	10/17/22 11:51	10/20/22 15:50	1
Nitrobenzene-d5 Phenol-d5	86 95		47 - 110 37 - 110	10/17/22 11:51 10/17/22 11:51	10/20/22 15:50 10/20/22 15:50	1 1 1 1

Lab Sample ID: LCS 180-415298/2-A

Matrix: Water

Analysis Batch: 415666

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 415298

Analysis Balcii: 410000	Spike Added	LCS	LCS Qualifier	Unit	D	9/ Boo	%Rec Limits
Analyte		6.98	Qualifier	Unit		%Rec 70	33 - 145
Acenaphthana	10.0	7.03		ug/L		70 70	33 - 145 47 - 145
Acenaphthene Anthracene	10.0	6.86		ug/L ug/L		70 69	47 - 145 27 - 133
Benzidine	10.0	ND		ug/L ug/L		51	5 - 100
	10.0	6.76		_		68	33 - 143
Benzo[a]anthracene	10.0	5.39		ug/L		54	33 - 143 24 - 150
Benzo[b]fluoranthene	10.0	6.94		ug/L			11 - 150
Benzo[k]fluoranthene	10.0	7.60		ug/L		69 76	
Benzo[g,h,i]perylene	10.0	6.06		ug/L		76 61	10 ₋ 150 17 ₋ 150
Benzo[a]pyrene				ug/L			12 - 150
Bis(2-chloroethyl)ether	10.0 10.0	7.00 ND		ug/L ug/L		70 58	10 - 150
Bis(2-ethylhexyl) phthalate		6.78		-		56 68	53 - 127
4-Bromophenyl phenyl ether	10.0	5.92		ug/L		59	10 - 150
Butyl benzyl phthalate	10.0	7.50		ug/L		59 75	22 - 147
4-Chloro-3-methylphenol 2-Chloronaphthalene	10.0	6.41		ug/L ug/L		75 64	22 - 147 60 - 120
							23 - 134
2-Chlorophenol	10.0 10.0	7.45		ug/L		75 60	
Chrysene	10.0	6.90 7.24		ug/L		69 72	17 - 150 10 - 150
Dibenzo(a,h)-anthracene				ug/L			
Di-n-butyl phthalate	10.0	7.07		ug/L		71 74	10 - 120
3,3'-Dichlorobenzidine	10.0	7.12		ug/L		71 74	10 - 150
2,4-Dichlorophenol	10.0	7.07		ug/L		71	39 - 135
Diethyl phthalate	10.0	6.99		ug/L		70	10 - 120
2,4-Dimethylphenol	10.0	6.72		ug/L		67	32 - 120
Dimethyl phthalate	10.0	6.67		ug/L		67	10 - 120
4,6-Dinitro-2-methylphenol	20.0	11.6		ug/L		58	10 - 150
2,4-Dinitrophenol	20.0	11.5		ug/L		57	10 - 150
2,4-Dinitrotoluene	10.0	7.83		ug/L		78	39 - 139
2,6-Dinitrotoluene	10.0	7.43		ug/L		74	50 - 150
Di-n-octyl phthalate	10.0	4.63		ug/L		46	10 - 146
Fluoranthene	10.0	7.78		ug/L		78	26 - 137
Fluorene	10.0	7.21		ug/L		72	59 - 121
Hexachlorobenzene	10.0	7.36		ug/L		74	10 - 150
Hexachlorobutadiene	10.0	6.64		ug/L		66	24 - 120
Hexachlorocyclopentadiene	10.0	5.51		ug/L		55	37 - 121
Hexachloroethane	10.0	6.90		ug/L		69	40 - 120
Indeno[1,2,3-cd]pyrene	10.0	7.37		ug/L		74	10 - 150

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Client: ARCADIS U.S., Inc. Job ID: 180-146141-1

Spike

LCS LCS

Project/Site: Cytec Havre de Grace MD

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 180-415298/2-A

Matrix: Water

Analysis Batch: 415666

Client Sample ID: Lab Control Sample

Prep	o Type: Total/NA
Pre	p Batch: 415298
%Re	С

	- 1				,	
Analyte	Added	Result	Qualifier Unit	D %Rec	Limits	
Isophorone	10.0	6.64	ug/L	66	21 - 150	
Naphthalene	10.0	7.28	ug/L	73	21 - 133	
Nitrobenzene	10.0	6.40	ug/L	64	35 - 150	
2-Nitrophenol	10.0	7.26	ug/L	73	29 - 150	
4-Nitrophenol	20.0	10.6	ug/L	53	10 - 132	
N-Nitrosodimethylamine	10.0	7.09	ug/L	71	33 - 130	
N-Nitrosodiphenylamine	10.0	6.58	ug/L	66	51 - 100	
N-Nitrosodi-n-propylamine	10.0	7.94	ug/L	79	10 - 150	
2,2'-oxybis[1-chloropropane]	10.0	9.87	ug/L	99	36 - 150	
Pentachlorophenol	20.0	15.2	ug/L	76	14 - 150	
Phenanthrene	10.0	6.70	ug/L	67	54 - 120	
Phenol	10.0	7.14	ug/L	71	10 - 120	
Pyrene	10.0	6.11	ug/L	61	52 - 120	
1,2,4-Trichlorobenzene	10.0	6.55	ug/L	65	44 - 142	
2,4,6-Trichlorophenol	10.0	6.35	ug/L	63	37 - 144	
Bis(2-chloroethoxy)methane	10.0	5.96	ug/L	60	33 - 150	
4-Chlorophenyl phenyl ether	10.0	6.91	ug/L	69	25 - 150	
1,2-Diphenylhydrazine(as	10.0	4.78	ug/L	48	43 - 105	
Azobenzene)						

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl	85		47 - 107
2-Fluorophenol	95		35 - 109
2,4,6-Tribromophenol	108		32 - 127
Nitrobenzene-d5	87		47 - 110
Phenol-d5	93		37 - 110
Terphenyl-d14	88		32 - 115

Lab Sample ID: 180-146141-1 MS

Matrix: Water

Analysis Batch: 415666

Client Sample ID: POTWOUTFALL ((101222)
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Prep Type: Total/NA

Prep Batch: 415298

Alialysis Balcii. 413000	Sample	Sample	Spike	MS	MS				%Rec
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Acenaphthylene	ND		10.0	6.14		ug/L		61	35 - 145
Acenaphthene	ND		10.0	6.30		ug/L		63	47 - 145
Anthracene	ND		10.0	5.92		ug/L		59	27 - 133
Benzidine	ND	F1	10.0	ND	F1	ug/L		0	5 - 100
Benzo[a]anthracene	ND		10.0	6.21		ug/L		62	33 - 143
Benzo[b]fluoranthene	ND		10.0	5.07		ug/L		51	24 - 159
Benzo[k]fluoranthene	ND		10.0	5.97		ug/L		60	11 - 162
Benzo[g,h,i]perylene	ND		10.0	7.13		ug/L		71	10 - 170
Benzo[a]pyrene	ND		10.0	5.18		ug/L		52	17 - 163
Bis(2-chloroethyl)ether	ND		10.0	6.31		ug/L		63	12 - 158
Bis(2-ethylhexyl) phthalate	ND		10.0	6.39	J	ug/L		64	10 - 158
4-Bromophenyl phenyl ether	ND		10.0	6.27		ug/L		63	53 - 127
Butyl benzyl phthalate	ND		10.0	5.81		ug/L		58	10 - 152
4-Chloro-3-methylphenol	ND		10.0	5.66		ug/L		57	22 - 147
2-Chloronaphthalene	ND	F1	10.0	5.69	F1	ug/L		57	60 - 120
2-Chlorophenol	ND		10.0	5.45		ug/L		54	23 - 134

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11/3/2022

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Spike

Added

Client: ARCADIS U.S., Inc.

Job ID: 180-146141-1

MS MS

Result Qualifier Unit

Project/Site: Cytec Havre de Grace MD

Method: EPA 625.1 - Semivolatile Organic Compounds (GC/MS) (Continued)

Sample Sample

Result Qualifier

Lab Sample ID: 180-146141-1 MS

Matrix: Water

Analyte

Analysis Batch: 415666

Bis(2-chloroethoxy)methane

4-Chlorophenyl phenyl ether

1,2-Diphenylhydrazine(as

Azobenzene)

Client Sample ID: POTWOUTFALL (101222)

D %Rec

%Rec

Limits

Prep Type: Total/NA Prep Batch: 415298

, ,		,			_ /0		
Chrysene	ND	10.0	6.23	ug/L	62	17 - 168	
Dibenzo(a,h)-anthracene	ND	10.0	6.78	ug/L	68	10 - 170	
Di-n-butyl phthalate	ND	10.0	6.77	ug/L	68	10 - 120	
3,3'-Dichlorobenzidine	ND	10.0	4.54	ug/L	45	10 - 170	
2,4-Dichlorophenol	ND	10.0	5.01	ug/L	50	39 - 135	
Diethyl phthalate	ND	10.0	5.01	ug/L	50	10 - 120	
2,4-Dimethylphenol	ND	10.0	4.78	ug/L	48	32 - 120	
Dimethyl phthalate	ND	10.0	4.65	ug/L	47	10 - 120	
4,6-Dinitro-2-methylphenol	ND	20.0	11.0	ug/L	55	10 - 170	
2,4-Dinitrophenol	ND	20.0	11.8	ug/L	59	10 - 170	
2,4-Dinitrotoluene	ND	10.0	7.06	ug/L	71	39 - 139	
2,6-Dinitrotoluene	ND	10.0	6.74	ug/L	67	50 - 158	
Di-n-octyl phthalate	ND	10.0	4.91	ug/L	49	10 - 146	
Fluoranthene	ND	10.0	7.11	ug/L	71	26 - 137	
Fluorene	ND	10.0	6.51	ug/L	65	59 - 121	
Hexachlorobenzene	ND	10.0	6.87	ug/L	69	10 - 152	
Hexachlorobutadiene	ND	10.0	5.68	ug/L	57	24 - 120	
Hexachlorocyclopentadiene	ND	10.0	4.73	ug/L	47	41 - 106	
Hexachloroethane	ND	10.0	5.97	ug/L	60	40 - 120	
Indeno[1,2,3-cd]pyrene	ND	10.0	6.78	ug/L	68	10 - 170	
Isophorone	ND	10.0	6.23	ug/L	62	21 - 170	
Naphthalene	ND	10.0	6.31	ug/L	63	21 - 133	
Nitrobenzene	ND	10.0	5.79	ug/L	58	35 - 170	
2-Nitrophenol	ND	10.0	5.42	ug/L	54	29 - 170	
4-Nitrophenol	ND	20.0	8.02	ug/L	40	10 - 132	
N-Nitrosodimethylamine	ND	10.0	6.40	ug/L	64	48 - 109	
N-Nitrosodiphenylamine	ND F1	10.0	4.49 F1	ug/L	45	56 - 100	
N-Nitrosodi-n-propylamine	ND	10.0	7.21	ug/L	72	10 - 170	
2,2'-oxybis[1-chloropropane]	ND	10.0	9.09	ug/L	91	36 - 166	
Pentachlorophenol	ND	20.0	10.7	ug/L	54	17 - 170	
Phenanthrene	ND	10.0	6.29	ug/L	63	54 - 120	
Phenol	ND	10.0	5.48	ug/L	55	10 - 120	
Pyrene	ND	10.0	5.56	ug/L	56	52 - 120	
1,2,4-Trichlorobenzene	ND	10.0	5.62	ug/L	56	44 - 142	
2,4,6-Trichlorophenol	ND	10.0	4.27	ug/L	43	37 - 144	

10.0

10.0

10.0

5.58

6.19

4.37 F1

ug/L

ug/L

ug/L

56

62

33 - 170

25 - 158

46 - 103

1S	MS

ND

ND

ND F1

Surrogate	%Recovery	Qualifier	Limits
2-Fluorobiphenyl	80		47 - 107
2-Fluorophenol	83		35 - 109
2,4,6-Tribromophenol	91		32 - 127
Nitrobenzene-d5	86		47 - 110
Phenol-d5	83		37 - 110
Terphenyl-d14	87		32 - 115

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11

Client: ARCADIS U.S., Inc.

MR MR

Project/Site: Cytec Havre de Grace MD

Method: EPA 200.7 Rev 4 - Metals (ICP)

Lab Sample ID: MB 180-416128/1-A

Matrix: Water

Analysis Batch: 416359

Client Sample ID: Method Blank **Prep Type: Total Recoverable**

Prep Batch: 416128

Job ID: 180-146141-1

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		10	5.7	ug/L		10/25/22 11:45	10/27/22 00:11	1
Cadmium	ND		5.0	0.33	ug/L		10/25/22 11:45	10/27/22 00:11	1
Chromium	ND		5.0	2.6	ug/L		10/25/22 11:45	10/27/22 00:11	1
Copper	ND		25	3.9	ug/L		10/25/22 11:45	10/27/22 00:11	1
Lead	ND		10	2.3	ug/L		10/25/22 11:45	10/27/22 00:11	1
Nickel	ND		40	2.1	ug/L		10/25/22 11:45	10/27/22 00:11	1
Silver	ND		5.0	0.87	ug/L		10/25/22 11:45	10/27/22 00:11	1
Zinc	ND		20	3.3	ug/L		10/25/22 11:45	10/27/22 00:11	1

Lab Sample ID: LCS 180-416128/2-A

Matrix: Water

Analysis Batch: 416359

Client Sample ID: Lab Control Sample Prep Type: Total Recoverable

Client Sample ID: Method Blank

Prep Type: Total/NA **Prep Batch: 416511**

Prep Type: Total/NA

Prep Batch: 416128

LCS LCS %Rec Spike Analyte Added Result Qualifier D %Rec Limits Unit Arsenic 1000 1140 85 - 115 ug/L 114 500 Cadmium 577 ug/L 115 85 _ 115 Chromium 500 544 ug/L 109 85 - 115 500 539 108 85 - 115 Copper ug/L Lead 500 535 107 85 - 115 ug/L ug/L Nickel 500 559 112 85 _ 115 Silver 250 277 ug/L 111 85 - 115 Zinc 250 277 ug/L 111 85 - 115

Method: EPA 245.1 Rev. - Mercury (CVAA)

Lab Sample ID: MB 180-416511/1-A

Matrix: Water

Analysis Batch: 416617

MB MB

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Mercury $\overline{\mathsf{ND}}$ 0.20 0.13 ug/L 10/28/22 06:47 10/28/22 13:55

Lab Sample ID: LCS 180-416511/2-A

Matrix: Water

Analyte

Mercury

Analysis Batch: 416617

Spike Added 2.50

LCS LCS Result Qualifier 2.74

Unit ug/L

Prep Batch: 416511 %Rec %Rec Limits 110 85 - 115

Client Sample ID: Lab Control Sample

Method: SM 4500CN E - Total Cyanide

Lab Sample ID: MB 180-416138/4-A

Matrix: Water

Analysis Batch: 416228

MB MB

Analyte Cyanide, Total

Result Qualifier ND

MDL Unit 0.0080 mg/L

Prepared 10/25/22 13:45 10/25/22 16:31

Prep Batch: 416138

Prep Type: Total/NA

Client Sample ID: Method Blank

Analyzed Dil Fac

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RL

0.010

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11/3/2022

Client: ARCADIS U.S., Inc.

Job ID: 180-146141-1

Project/Site: Cytec Havre de Grace MD

Method: SM 4500CN E - Total Cy	yanide (Continued)
--------------------------------	--------------------

Analyte

Cyanide, Total

Lab Sample ID: HLCS 180-416138/2-A Matrix: Water Analysis Batch: 416228				Clie	nt Sar	nple ID	: Lab Control Sample Prep Type: Total/NA Prep Batch: 416138
	Spike		HLCS		_		%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Cyanide, Total	0.250	0.252		mg/L		101	90 - 110
Lab Sample ID: LCS 180-416138/3-A Matrix: Water Analysis Batch: 416228				Clie	nt Sar	nple ID	: Lab Control Sample Prep Type: Total/NA Prep Batch: 416138
	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Cyanide, Total	0.200	0.215		mg/L		107	90 - 110
Lab Sample ID: LLCS 180-416138/1-A				Clie	nt Sar	nple ID	: Lab Control Sample
Matrix: Water							Prep Type: Total/NA
Analysis Batch: 416228							Prep Batch: 416138
	Spike	LLCS	LLCS				%Rec

Result Qualifier Unit

mg/L

0.0515

Added

0.0500

Limits

90 - 110

QC Association Summary

Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

GC/MS VOA

Analysis Batch: 415073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-146141-1	POTWOUTFALL (101222)	Total/NA	Water	EPA 624.1	
MB 180-415073/7	Method Blank	Total/NA	Water	EPA 624.1	
LCS 180-415073/5	Lab Control Sample	Total/NA	Water	EPA 624.1	

GC/MS Semi VOA

Prep Batch: 415298

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-146141-1	POTWOUTFALL (101222)	Total/NA	Water	625	
MB 180-415298/1-A	Method Blank	Total/NA	Water	625	
LCS 180-415298/2-A	Lab Control Sample	Total/NA	Water	625	
180-146141-1 MS	POTWOUTFALL (101222)	Total/NA	Water	625	

Analysis Batch: 415666

Lab Sample ID 180-146141-1	Client Sample ID POTWOUTFALL (101222)	Prep Type Total/NA	Matrix Water	Method EPA 625.1	Prep Batch 415298
MB 180-415298/1-A	Method Blank	Total/NA	Water	EPA 625.1	415298
LCS 180-415298/2-A	Lab Control Sample	Total/NA	Water	EPA 625.1	415298
180-146141-1 MS	POTWOUTFALL (101222)	Total/NA	Water	EPA 625.1	415298

Metals

Prep Batch: 416128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-146141-1	POTWOUTFALL (101222)	Total Recoverable	Water	200.7	
MB 180-416128/1-A	Method Blank	Total Recoverable	Water	200.7	
LCS 180-416128/2-A	Lab Control Sample	Total Recoverable	Water	200.7	

Analysis Batch: 416359

<u>Lab Sample ID</u> 180-146141-1	Client Sample ID POTWOUTFALL (101222)	Prep Type Total Recoverable	Matrix Water	Method EPA 200.7 Rev 4	Prep Batch 416128
MB 180-416128/1-A	Method Blank	Total Recoverable	Water	EPA 200.7 Rev 4	416128
LCS 180-416128/2-A	Lab Control Sample	Total Recoverable	Water	EPA 200.7 Rev 4	416128

Prep Batch: 416511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-146141-1	POTWOUTFALL (101222)	Total/NA	Water	245.1	_
MB 180-416511/1-A	Method Blank	Total/NA	Water	245.1	
LCS 180-416511/2-A	Lab Control Sample	Total/NA	Water	245.1	

Analysis Batch: 416617

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-146141-1	POTWOUTFALL (101222)	Total/NA	Water	EPA 245.1 Rev.	416511
MB 180-416511/1-A	Method Blank	Total/NA	Water	EPA 245.1 Rev.	416511
LCS 180-416511/2-A	Lab Control Sample	Total/NA	Water	EPA 245.1 Rev.	416511

General Chemistry

Prep Batch: 416138

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-146141-1	POTWOUTFALL (101222)	Total/NA	Water	SM 4500 CN C	
MB 180-416138/4-A	Method Blank	Total/NA	Water	SM 4500 CN C	

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Job ID: 180-146141-1

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QC Association Summary

Client: ARCADIS U.S., Inc. Job ID: 180-146141-1

Project/Site: Cytec Havre de Grace MD

General Chemistry (Continued)

Prep Batch: 416138 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
HLCS 180-416138/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LCS 180-416138/3-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LLCS 180-416138/1-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	

Analysis Batch: 416228

Lab Sample ID 180-146141-1	Client Sample ID POTWOUTFALL (101222)	Prep Type Total/NA	Matrix Water	Method SM 4500CN E	Prep Batch 416138
MB 180-416138/4-A	Method Blank	Total/NA	Water	SM 4500CN E	416138
HLCS 180-416138/2-A	Lab Control Sample	Total/NA	Water	SM 4500CN E	416138
LCS 180-416138/3-A	Lab Control Sample	Total/NA	Water	SM 4500CN E	416138
LLCS 180-416138/1-A	Lab Control Sample	Total/NA	Water	SM 4500CN E	416138

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None
Ashao2
Na204S
Na203
Na2503
Na25203
H2504
H2504
NACA4
V pH 4-5
Trizma
c other (specify) Ver 06 08 2021 180-146141 Chain of Custody Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client Disposal By Lab Archive For Mont
Special Instructions/QC Requirements COC No: 180-85399-15095 · reservation Cod Amchlor Ascorbic Acid Zn Acetate Nitric Acid NaHSO4 Page: Page 1 of 1 Ice DI Water EDTA EDA Enemistrop to redmuN latoT 100 Method of Shipment: amier Tracking No(s): State of Origin: Analysis Requested Cooler Temperature(s) °C and Other Remarks: Lab PM: Colussy Jill L E-Mail: Jill Colussy@et.eurofinsus.com 5PA 200. 7 Rev4 (245.1 Rev4 Time: (W=water S=solid, O=waste/oi BT=Tissue, A=Air) Matrix Preservation Code: Company 3 Radiological (C=comp, G=grab) Keh Sample Type (780 -9029 Compliance Project: A Yes A No 8 Sample Time 1030 Date/Time: 0/ [2-[33-956-64h ţ Date: Sampler. O. Kromer Unknown FAT Requested (days): Due Date Requested: PO #; 30005455.0002. Sample Date 10112122 WO#: 30114618 Project #: 18017987 7 Date/Time: Poison B Skin Irritant Deliverable Requested: I III IV Other (specify) 0TWOUTFOILLIDI222 Custody Seal No. Phone: 412-963-7058 Fax; 412-963-2468 Fronce Flammable shwetha.sridharan@arcadis.com Possible Hazard Identification 7550 Teague Road Suite 210 Project Name: Cytec Havre de Grace MD Empty Kit Relinquished by Custody Seals Intact: △ Yes △ No Paird rip Blank Client Information Ms. Shwetha Sridharan Sample Identification ARCADIS U.S Inc. Phone: |302-897-8993(Tel) Non-Hazard linquished by: nquished by Pennsylvania inquished by: State, Zip: MD, 21076 Hanover

Ter

💸 eurofins

Chain of Custody Record

Ballimore

Eurofins Pittsburgh 301 Alpha Drive RIDC Park

Pittsburgh PA 15238

Client: ARCADIS U.S., Inc.

Job Number: 180-146141-1

Login Number: 146141 List Source: Eurofins Pittsburgh

List Number: 1

Creator: Kovitch, Christina M

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Cytec Solvay Group 1300 Revolution Street Havre de Grace, MD 21078 410.939.1910

January 9, 2023

Mr. Ken Montgomery Industrial Pretreatment Coordinator City of Havre de Grace Department of Public Works 711 Pennington Avenue Havre de Grace, Maryland 21078

Re: CYTEC SOLVAY GROUP AEROSPACE MATERIALS

Periodic Compliance Report – December 2022

Permit Number: CYT-2015-101

Dear Mr. Montgomery:

CYTEC SOLVAY GROUP (Cytec) has prepared this Periodic Compliance Report for the month of December 2022 in accordance with the conditions set forth in Cytec's Industrial User Wastewater Discharge Permit (Permit No. CYT-2015-101). This Periodic Compliance Report presents the results of all monitoring requirements and operational issues encountered during the month of December 2022. The monthly certification form is included as Attachment A.

For the month of December, the system pumped an estimated 220,914 gallons of wastewater at an estimated average flow rate of 4.95 gallons per minute to the City of Havre de Grace Wastewater Treatment Plant during active system operation. The estimated average flow rate of 4.95 gallons per minute for the month of December satisfied both permit flow limitations (maximum of 30,000 gallons per day; 30-minute maximum of 1,000 gallons).

One pH meter is presently installed in-line with the effluent discharge pipe to measure pH continuously. pH results from the effluent wastewater complied with all permit conditions for pH during the month of December and no significant deviations were noted during active operation. Table 1 presents the daily flow volumes and weekly pH readings recorded for the month of December.

As noted in the March 2022 report, the pump motor at EW-02 is faulty and currently pending replacement, dependent on when parts can be shipped from the manufacturer, and EW-02 has been shut down since March 15, 2022. Parts have been procured and replacement will be completed on January 10, 2023. On December 10, the system was automatically shut down due a drive-fault alarm, triggered by a power fluctuation in the facility. The system was restarted on December 14, 2022 by onsite staff. On December 16, the system was automatically shut down due to an E-stop alarm. The system was restarted within 24 hours by onsite staff.

The January Compliance Report will be submitted in February 2023. Daily flow and pH will continue to be measured continuously. If the system is shut down for a period of at least 24 hours, pH results will be monitored and reported for three consecutive days to maintain compliance with permit conditions.

If you have any questions or comments, please contact me at 443-252-1093.

Sincerely, Cytec Solvay Group

Tyler Stephens HSE Manager

Enclosure

cc: Mr. Luis Pizarro, United States Environmental Protection Agency

Mr. Charles Jones, Cytec Solvay Group

Mr. Joshua Wilson, Arcadis Ms. Shwetha Sridharan, Arcadis

Table 1
Flow and pH Monitoring for December 2022
Cytec Solvay Group
Havre de Grace, Maryland

Date	Cumulative Total Gallons Extracted (MW-10D)	Cumulative Total Gallons Extracted (EW-01)	Cumulative Total Gallons Extracted (EW-02)	Combined Cumulative Total Gallons Extracted	Daily Total Gallons Extracted	рН
12/01/22	21,368,910	4,743,990	3,408,198	29,521,098	10,699	
12/02/22	21,377,897	4,745,702	3,408,198	29,531,797	10,698	5.83
12/03/22	21,386,884	4,747,413	3,408,198	29,542,495	10,696	
12/04/22	21,395,870	4,749,123	3,408,198	29,553,191	10,701	
12/05/22	21,404,858	4,750,836	3,408,198	29,563,892	10,700	
12/06/22	21,413,846	4,752,548	3,408,198	29,574,592	10,700	
12/07/22	21,422,835	4,754,259	3,408,198	29,585,292	10,687	
12/08/22	21,431,820	4,755,961	3,408,198	29,595,979	10,695	
12/09/22	21,440,806	4,757,670	3,408,198	29,606,674	8,993	5.84
12/10/22	21,448,361	4,759,108	3,408,198	29,615,667	0	
12/11/22	21,448,361	4,759,108	3,408,198	29,615,667	0	
12/12/22	21,448,361	4,759,108	3,408,198	29,615,667	0	
12/13/22	21,448,361	4,759,108	3,408,198	29,615,667	0	
12/14/22	21,448,361	4,759,108	3,408,198	29,615,667	8,882	6.31
12/15/22	21,455,823	4,760,528	3,408,198	29,624,549	4,062	5.83
12/16/22	21,459,235	4,761,178	3,408,198	29,628,611	8,447	5.71
12/17/22	21,466,332	4,762,528	3,408,198	29,637,058	10,701	
12/18/22	21,475,322	4,764,239	3,408,198	29,647,759	10,700	
12/19/22	21,484,311	4,765,950	3,408,198	29,658,459	10,702	
12/20/22	21,493,301	4,767,662	3,408,198	29,669,161	10,701	
12/21/22	21,502,290	4,769,374	3,408,198	29,679,862	10,703	
12/22/22	21,511,280	4,771,087	3,408,198	29,690,565	10,701	5.76
12/23/22	21,520,270	4,772,798	3,408,198	29,701,266	1,454	
12/24/22	21,521,494	4,773,028	3,408,198	29,702,720	1,454	
12/25/22	21,522,718	4,773,257	3,408,198	29,704,174	1,454	
12/26/22	21,523,943	4,773,487	3,408,198	29,705,628	1,454	
12/27/22	21,525,167	4,773,717	3,408,198	29,707,081	1,454	
12/28/22	21,526,391	4,773,946	3,408,198	29,708,535	1,454	
12/29/22	21,527,615	4,774,176	3,408,198	29,709,989	10,675	
12/30/22	21,536,598	4,775,868	3,408,198	29,720,664	10,675	5.77
12/31/22	21,545,580	4,777,561	3,408,198	29,731,339	10,673	

Notes:

- 1. Operation of the expanded system began on January 16, 2015.
- 2. Totalizer readings are collected daily at 0800 at EW-01 and EW-02. In May 2018, the totalizer at MW-10D rolled over to a value greater than 10 million and the value was no longer presented on the system data tab. As a result, the totalizer reading was estimated between May 2018 and August 2019, based on the total flow in gallons recorded for the previous 24 hours. A system update was completed in August 2019 that reduced the totalizer reading for MW-10D by 10 million gallons.
- 3. Italics indicates estimated value for monthly and daily flow.

Table 2 Flow and pH Monitoring for December 2022 Cytec Solvay Group Havre de Grace, Maryland

Date	Root Cause for Alarm	Response
3/15/2022 - Present	P-300 Overload Fault	The P-300 Overload alarm remains active as the motor at EW-02 has failed and needs to be replaced. EW-02 currently remains off. Motor to be replaced on 1/10/23.
12/10/2022	Drive-fault alarms	The system was automatically shut down due to a drive fault alarm, triggered by a power fluctuation. Alarms were cleared and the system was restarted on 12/14 by onsite personnel.
12/16/2022	E-Stop	The system was automatically shut down due to an E-stop alarm, triggered by a power fluctuation. Alarms were cleared and the system was restarted within 24 hours by onsite personnel.

Attachment A

Attachment A

CYTEC SOLVAY GROUP PERIODIC COMPLIANCE REPORT

REPORTING MONTH/YEAR	December 2022	
TOTAL VOLUME DISCHARGED	220,914 Gallons	
supervision in accordance with a syste evaluate the information submitted. Ba or those persons directly responsible fo my knowledge and belief, true, accurat	document and all attachments were preparem designed to assure that qualified personsed on my inquiry of the person or persons r gathering the information, the information te, and complete. I am aware that there are the possibility of fine and imprisonment for	onnel properly gather and who manage the system, submitted is, to the best of re significant penalties for
 Date	Authorized Representative	

Appendix D

Groundwater Laboratory Analytical Reports

ANALYTICAL REPORT

Eurofins Pittsburgh 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 Tel: (412)963-7058

Laboratory Job ID: 180-144683-1

Client Project/Site: Cytec Havre de Grace MD

For:

eurofins 🔅

ARCADIS U.S., Inc. 7550 Teague Road Suite 210 Hanover, Maryland 21076

Attn: Ms. Shwetha Sridharan



Authorized for release by: 10/17/2022 10:45:57 AM

Jill Colussy, Project Manager I (412)963-2444

Jill.Colussy@et.eurofinsus.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

PA Lab ID: 02-00416



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Client: ARCADIS U.S., Inc. Project/Site: Cytec Havre de Grace MD Laboratory Job ID: 180-144683-1

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Case Narrative

Client: ARCADIS U.S., Inc.

Job ID: 180-144683-1 Project/Site: Cytec Havre de Grace MD

Job ID: 180-144683-1

Laboratory: Eurofins Pittsburgh

Narrative

Job Narrative 180-144683-1

Receipt

The samples were received on 9/17/2022 8:55 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.0° C, 2.8° C and 4.0° C.

The laboratory received a TRIP BLANK that was not listed on the chain of custody.

GC/MS VOA

Due to the concentration of target compounds detected, several samples were analyzed at a dilution. The reporting limits have been adjusted accordingly.

The continuing calibration verification (CCV) analyzed in 180-412846 was outside the method criteria for the following analyte(s): Chloroethane. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The continuing calibration verification (CCV) analyzed in 180-412972 was outside the method criteria for the following analyte(s): Chloroethane. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

IC

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

following samples were not filtered within 15 minutes of sample collection as required by the method: MW18 (091522) 24 (180-144683-2), MW18 (091522) 31 (180-144683-3), MW27 (091522) (180-144683-4), MW14I (091522) (180-144683-5), MW23 (091522) 40 (180-144683-6), MW23 (091522) 47 (180-144683-7), MW19DI (091522) (180-144683-8), MW20DI (091522) (180-144683-9), MW3 (091522) (180-144683-10), MW16 (091522) (180-144683-11) and DUP02 (091522) (180-144683-12). The sample(s) was filtered prior to analysis at the laboratory, and the results have been reported.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: ARCADIS U.S., Inc. Job ID: 180-144683-1

Project/Site: Cytec Havre de Grace MD

Qualifiers

GC/MS VOA

Qualifier **Qualifier Description**

Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

HPLC/IC

Qualifier **Qualifier Description**

F1 MS and/or MSD recovery exceeds control limits.

Metals

Qualifier **Qualifier Description**

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier **Qualifier Description**

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery CFL Contains Free Liquid CFU Colony Forming Unit CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

DL Detection Limit (DoD/DOE)

DL, RA, RE, IN Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin) LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level" Minimum Detectable Activity (Radiochemistry) MDA MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit ML Minimum Level (Dioxin) MPN Most Probable Number Method Quantitation Limit MQL

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

PQL **Practical Quantitation Limit**

Presumptive **PRES** QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry) RL

RPD Relative Percent Difference, a measure of the relative difference between two points

TEF Toxicity Equivalent Factor (Dioxin) TEQ Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

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10/17/2022

Accreditation/Certification Summary

Client: ARCADIS U.S., Inc. Job ID: 180-144683-1

Project/Site: Cytec Havre de Grace MD

Laboratory: Eurofins Pittsburgh

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	19-033-0	06-27-22 *
California	State	2891	04-30-23
Connecticut	State	PH-0688	09-30-22 *
Florida	NELAP	E871008	06-30-23
Georgia	State	PA 02-00416	04-30-23
Illinois	NELAP	004375	06-30-23
Kansas	NELAP	E-10350	03-31-23
Kentucky (UST)	State	162013	04-30-23
Kentucky (WW)	State	KY98043	12-31-22
Louisiana	NELAP	04041	06-30-22 *
Louisiana (All)	NELAP	04041	06-30-23
Maine	State	PA00164	03-06-24
Minnesota	NELAP	042-999-482	12-31-22
New Hampshire	NELAP	2030	04-04-23
New Jersey	NELAP	PA005	06-30-23
New York	NELAP	11182	04-01-23
North Carolina (WW/SW)	State	434	12-31-22
North Dakota	State	R-227	04-30-23
Oregon	NELAP	PA-2151	02-07-23
Pennsylvania	NELAP	02-00416	04-30-23
Rhode Island	State	LAO00362	12-31-22
South Carolina	State	89014	04-20-23
Texas	NELAP	T104704528	03-31-23
USDA	US Federal Programs	P330-16-00211	06-21-24
Utah	NELAP	PA001462019-8	05-31-23
Virginia	NELAP	10043	09-14-23
West Virginia DEP	State	142	01-31-23
Wisconsin	State	998027800	08-31-23

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 $^{^{\}star}\,\text{Accreditation/Certification renewal pending - accreditation/certification considered valid}.$

Eurofins Pittsburgh

Sample Summary

Client: ARCADIS U.S., Inc.

Job ID: 180-144683-1

Project/Site: Cytec Havre de Grace MD

TRIP BLANK

180-144683-25

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
180-144683-1	DUP01 (091422)	Water	09/14/22 12:00	09/17/22 08:55
180-144683-2	MW18 (091522)_24	Water	09/15/22 08:10	09/17/22 08:55
180-144683-3	MW18 (091522)_31	Water	09/15/22 08:20	09/17/22 08:55
180-144683-4	MW27 (091522)	Water	09/15/22 07:45	09/17/22 08:55
180-144683-5	MW14I (091522)	Water	09/15/22 08:30	09/17/22 08:55
180-144683-6	MW23 (091522)_40	Water	09/15/22 09:00	09/17/22 08:55
180-144683-7	MW23 (091522)_47	Water	09/15/22 09:10	09/17/22 08:55
180-144683-8	MW19DI (091522)	Water	09/15/22 09:30	09/17/22 08:55
180-144683-9	MW20DI (091522)	Water	09/15/22 09:50	09/17/22 08:55
180-144683-10	MW3 (091522)	Water	09/15/22 10:45	09/17/22 08:55
180-144683-11	MW16 (091522)	Water	09/15/22 12:00	09/17/22 08:55
180-144683-12	DUP02 (091522)	Water	09/15/22 12:00	09/17/22 08:55
180-144683-13	MW14(091422)	Water	09/14/22 09:25	09/17/22 08:55
180-144683-14	MW22D(091422)	Water	09/14/22 10:00	09/17/22 08:55
180-144683-15	MW13D(091422)	Water	09/14/22 10:55	09/17/22 08:55
180-144683-16	MW12D(091422)	Water	09/14/22 11:25	09/17/22 08:55
180-144683-17	MW12S(091422)	Water	09/14/22 11:15	09/17/22 08:55
180-144683-18	MW28D(091422)	Water	09/14/22 11:05	09/17/22 08:55
180-144683-19	MW25I(091422)	Water	09/14/22 11:40	09/17/22 08:55
180-144683-20	MW-4(091422)	Water	09/14/22 11:50	09/17/22 08:55
180-144683-21	MW-6I(091422)	Water	09/14/22 12:00	09/17/22 08:55
180-144683-22	MW8S(091422)	Water	09/14/22 10:30	09/17/22 08:55
180-144683-23	MW8D(091422)	Water	09/14/22 10:40	09/17/22 08:55
180-144683-24	TRIP BLANK	Water	09/14/22 00:00	09/17/22 08:55

Water

09/14/22 00:00 09/17/22 08:55

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Method Summary

Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Method **Method Description** Protocol Laboratory **EPA 8260C** Volatile Organic Compounds (GC/MS) SW846 **EET PIT** SW846 **EPA 9056A** Anions, Ion Chromatography **EET PIT** EPA 6020A Metals (ICP/MS) SW846 **EET PIT** EPA 9060A Organic Carbon, Total (TOC) SW846 EET PIT 3005A Preparation, Total Recoverable or Dissolved Metals SW846 **EET PIT** 5030C Purge and Trap SW846 **EET PIT** Filtration Sample Filtration None EET PIT

Protocol References:

None = None

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Job ID: 180-144683-1

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Lab Chronicle

Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Client Sample ID: DUP01 (091422)

Date Collected: 09/14/22 12:00

Date Received: 09/17/22 08:55

Dil Batch Batch Batch Initial Final Prepared Method or Analyzed **Prep Type** Type Run **Factor Amount** Amount Number Analyst Lab **EPA 8260C** 412837 09/22/22 10:44 EET PIT Total/NA Analysis 5 mL 5 mL Instrument ID: CHHP5

Client Sample ID: MW18 (091522)_24

Date Collected: 09/15/22 08:10 Date Received: 09/17/22 08:55

Batch Batch Dil Initial Final Batch Prepared Method Amount Number or Analyzed **Prep Type** Type Run **Factor** Amount Analyst Lab Total/NA Analysis **EPA 8260C** 412837 09/22/22 16:36 J1T EET PIT 5 mL 5 mL Instrument ID: CHHP5 Total/NA Analysis EPA 9056A 412610 09/20/22 18:06 **EET PIT** 1 M₁D Instrument ID: CHICS2100B Dissolved Filtration Filtration 1.0 mL 250 mL 414063 10/04/22 13:30 HCY EET PIT 3005A Dissolved 25 mL 25 mL 414345 10/06/22 16:00 Prep HCY **EET PIT** Dissolved Analysis **EPA 6020A** 1 415186 10/14/22 12:50 RSK **EET PIT** Instrument ID: DORY Prep Total Recoverable 3005A 25 mL 25 mL 413183 09/26/22 11:10 HCY EET PIT Total Recoverable Analysis **EPA 6020A** 1 414147 10/04/22 18:22 RSK **EET PIT** Instrument ID: DORY Total/NA Analysis **EPA 9060A** 40 mL 40 mL 414563 10/08/22 10:53 LWM **EET PIT**

Client Sample ID: MW18 (091522) 31

Instrument ID: SAM

Date Collected: 09/15/22 08:20 Date Received: 09/17/22 08:55

Batch Dil Batch Initial Final **Batch** Prepared Method or Analyzed **Prep Type** Type Run **Factor** Amount Amount Number **Analyst** Total/NA Analysis **EPA 8260C** 412837 09/22/22 17:00 J₁T **EET PIT** 5 mL Instrument ID: CHHP5 Total/NA Analysis EPA 9056A 412610 09/20/22 18:50 M1D **EET PIT** 1 Instrument ID: CHICS2100B Dissolved Filtration Filtration 1.0 mL 250 mL 414063 10/04/22 13:30 HCY EET PIT 3005A Dissolved 25 mL 414345 10/06/22 16:00 HCY Prep 25 mL **EET PIT** Dissolved EPA 6020A 415186 10/14/22 12:53 RSK Analysis 1 **EET PIT** Instrument ID: DORY Total Recoverable 3005A 25 mL 25 mL 413183 09/26/22 11:10 HCY EET PIT Prep Total Recoverable Analysis **EPA 6020A** 1 414147 10/04/22 18:25 RSK **EET PIT** Instrument ID: DORY Total/NA Analysis **EPA 9060A** 40 mL 414563 10/08/22 12:59 LWM **EET PIT** 40 mL Instrument ID: SAM

Job ID: 180-144683-1

Matrix: Water

Matrix: Water

Matrix: Water

Lab Sample ID: 180-144683-1

Lab Sample ID: 180-144683-2

Lab Sample ID: 180-144683-3

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Client Sample ID: MW27 (091522)

Project/Site: Cytec Havre de Grace MD

Date Collected: 09/15/22 07:45 Date Received: 09/17/22 08:55

Lab Sample ID: 180-144683-4

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 8260C t ID: CHHP5		1	5 mL	5 mL	412837	09/22/22 17:23	J1T	EET PIT
Total/NA	Analysis Instrumen	EPA 9056A t ID: CHICS2100B		1			412610	09/20/22 19:05	M1D	EET PIT
Dissolved	Filtration	Filtration			1.0 mL	250 mL	414063	10/04/22 13:30	HCY	EET PIT
Dissolved	Prep	3005A			25 mL	25 mL	414345	10/06/22 16:00	HCY	EET PIT
Dissolved	Analysis Instrumen	EPA 6020A t ID: DORY		1			415186	10/14/22 12:56	RSK	EET PIT
Total Recoverable	Prep	3005A			25 mL	25 mL	413183	09/26/22 11:10	HCY	EET PIT
Total Recoverable	Analysis Instrumen	EPA 6020A t ID: DORY		1			414147	10/04/22 18:29	RSK	EET PIT
Total/NA	Analysis Instrumen	EPA 9060A t ID: SAM		1	40 mL	40 mL	414563	10/08/22 13:46	LWM	EET PIT

Client Sample ID: MW14I (091522)

Date Collected: 09/15/22 08:30

Date Received: 09/17/22 08:55

Lab Sample ID: 180-144683-5

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 8260C t ID: CHHP5		1	5 mL	5 mL	412837	09/22/22 17:47	J1T	EET PI
Total/NA	Analysis Instrumen	EPA 9056A t ID: CHICS2100B		1			412610	09/20/22 19:20	M1D	EET PI
Dissolved	Filtration	Filtration			1.0 mL	250 mL	414063	10/04/22 13:30	HCY	EET PI
Dissolved	Prep	3005A			25 mL	25 mL	414345	10/06/22 16:00	HCY	EET PI
Dissolved	Analysis Instrumen	EPA 6020A t ID: DORY		1			415186	10/14/22 13:00	RSK	EET PI
Total Recoverable	Prep	3005A			25 mL	25 mL	413183	09/26/22 11:10	HCY	EET PI
Total Recoverable	Analysis Instrumen	EPA 6020A t ID: DORY		1			414147	10/04/22 18:32	RSK	EET PI
Total/NA	Analysis Instrumen	EPA 9060A t ID: SAM		1	40 mL	40 mL	414563	10/08/22 14:34	LWM	EET PI

Client Sample ID: MW23 (091522)_40

Date Collected: 09/15/22 09:00

Date Received: 09/17/22 08:55

Lab Sample ID:	180-144683-6
_a.a	
	Matrix: Water

Batch		Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	412972	09/23/22 09:47	J1T	EET PIT
	Instrumer	nt ID: CHHP9								
Total/NA	Analysis	EPA 9056A		1			412610	09/20/22 19:35	M1D	EET PIT
	Instrumer	nt ID: CHICS2100B								
Dissolved	Filtration	Filtration			1.0 mL	250 mL	414063	10/04/22 13:30	HCY	EET PIT
Dissolved	Prep	3005A			25 mL	25 mL	414345	10/06/22 16:00	HCY	EET PIT
Dissolved	Analysis	EPA 6020A		1			415186	10/14/22 13:03	RSK	EET PIT
	Instrumer	nt ID: DORY								

Eurofins Pittsburgh

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Lab Chronicle

Client: ARCADIS U.S., Inc. Job ID: 180-144683-1

Project/Site: Cytec Havre de Grace MD

Client Sample ID: MW23 (091522)_40

Lab Sample ID: 180-144683-6 Date Collected: 09/15/22 09:00

Matrix: Water

Date Received: 09/17/22 08:55

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			25 mL	25 mL	413183	09/26/22 11:10	HCY	EET PIT
Total Recoverable	Analysis Instrumer	EPA 6020A at ID: DORY		1			414147	10/04/22 18:36	RSK	EET PIT
Total/NA	Analysis Instrumer	EPA 9060A nt ID: SAM		1	40 mL	40 mL	414563	10/08/22 14:58	LWM	EET PIT

Lab Sample ID: 180-144683-7 Client Sample ID: MW23 (091522)_47

Date Collected: 09/15/22 09:10 **Matrix: Water**

Date Received: 09/17/22 08:55

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 8260C t ID: CHHP9		1	5 mL	5 mL	412972	09/23/22 11:13	J1T	EET PI
Total/NA	Analysis Instrumen	EPA 9056A t ID: CHICS2100B		1			412610	09/20/22 19:50	M1D	EET PIT
Dissolved	Filtration	Filtration			1.0 mL	250 mL	414063	10/04/22 13:30	HCY	EET PIT
Dissolved	Prep	3005A			25 mL	25 mL	414345	10/06/22 16:00	HCY	EET PI
Dissolved	Analysis Instrumen	EPA 6020A t ID: DORY		1			415186	10/14/22 13:06	RSK	EET PIT
Total Recoverable	Prep	3005A			25 mL	25 mL	413183	09/26/22 11:10	HCY	EET PIT
Total Recoverable	Analysis Instrumen	EPA 6020A t ID: DORY		1			414147	10/04/22 18:39	RSK	EET PIT
Total/NA	Analysis Instrumen	EPA 9060A t ID: SAM		1	40 mL	40 mL	414563	10/08/22 15:22	LWM	EET PI

Lab Sample ID: 180-144683-8 Client Sample ID: MW19DI (091522)

Date Collected: 09/15/22 09:30 Date Received: 09/17/22 08:55

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrument	EPA 8260C ID: CHHP9		1	5 mL	5 mL	412972	09/23/22 14:47	J1T	EET PIT
Total/NA	Analysis Instrument	EPA 8260C ID: CHHP9	DL	5	5 mL	5 mL	412972	09/23/22 16:34	J1T	EET PIT
Total/NA	Analysis Instrument	EPA 9056A ID: CHICS2100B		1			412610	09/20/22 20:34	M1D	EET PIT
Dissolved	Filtration	Filtration			1.0 mL	250 mL	414063	10/04/22 13:30	HCY	EET PIT
Dissolved	Prep	3005A			25 mL	25 mL	414345	10/06/22 16:00	HCY	EET PIT
Dissolved	Analysis Instrument	EPA 6020A ID: DORY		1			415186	10/14/22 13:10	RSK	EET PIT
Total Recoverable	Prep	3005A			25 mL	25 mL	413618	09/29/22 12:30	HCY	EET PIT
Total Recoverable	Analysis Instrument	EPA 6020A ID: A		1			414119	10/04/22 14:31	RSK	EET PIT
Total/NA	Analysis Instrument	EPA 9060A ID: SAM		1	40 mL	40 mL	414563	10/08/22 15:46	LWM	EET PIT

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Matrix: Water

Project/Site: Cytec Havre de Grace MD

Client Sample ID: MW20DI (091522)

Date Collected: 09/15/22 09:50 Date Received: 09/17/22 08:55

Client: ARCADIS U.S., Inc.

Lab Sample ID: 180-144683-9

Matrix: Water

D T	Batch	Batch	D	Dil	Initial	Final	Batch	Prepared	Amalust	Lab
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	412972	09/23/22 12:17	J1T	EET PIT
	Instrumen	it ID: CHHP9								
Total/NA	Analysis	EPA 9056A		1			412610	09/20/22 20:49	M1D	EET PIT
	Instrumen	t ID: CHICS2100B								
Dissolved	Filtration	Filtration			1.0 mL	250 mL	414063	10/04/22 13:30	HCY	EET PIT
Dissolved	Prep	3005A			25 mL	25 mL	414345	10/06/22 16:00	HCY	EET PIT
Dissolved	Analysis	EPA 6020A		1			415186	10/14/22 13:13	RSK	EET PIT
	Instrumen	t ID: DORY								
Total Recoverable	Prep	3005A			25 mL	25 mL	413618	09/29/22 12:30	HCY	EET PIT
Total Recoverable	Analysis	EPA 6020A		1			414119	10/04/22 14:35	RSK	EET PIT
	Instrumen	it ID: A								
Total/NA	Analysis	EPA 9060A		1	40 mL	40 mL	414563	10/08/22 16:10	LWM	EET PIT
	Instrumen	nt ID: SAM								

Client Sample ID: MW3 (091522)

Date Collected: 09/15/22 10:45 Date Received: 09/17/22 08:55

Lab Sample ID: 180-144683-10

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 8260C at ID: CHHP9		10	5 mL	5 mL	412972	09/23/22 11:34	J1T	EET PI
Total/NA	Analysis Instrumen	EPA 9056A at ID: CHICS2100B		1			412610	09/20/22 21:04	M1D	EET PI
Dissolved	Filtration	Filtration			1.0 mL	250 mL	414063	10/04/22 13:30	HCY	EET PI
Dissolved	Prep	3005A			25 mL	25 mL	414345	10/06/22 16:00	HCY	EET PI
Dissolved	Analysis Instrumen	EPA 6020A at ID: DORY		1			415186	10/14/22 13:16	RSK	EET PI
Total Recoverable	Prep	3005A			25 mL	25 mL	413618	09/29/22 12:30	HCY	EET PI
Total Recoverable	Analysis Instrumen	EPA 6020A at ID: A		1			414119	10/04/22 14:38	RSK	EET PI
Total/NA	Analysis Instrumen	EPA 9060A		1	40 mL	40 mL	414563	10/08/22 16:33	LWM	EET PI

Client Sample ID: MW16 (091522)

Date Collected: 09/15/22 12:00

Date Received: 09/17/22 08:55

Lab	Samp	le II	D:	180- 1	1446	83-11	
				8.4	4.4	100	

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	412972	09/23/22 11:56	J1T	EET PIT
	Instrumen	t ID: CHHP9								
Total/NA	Analysis	EPA 9056A		1			412610	09/20/22 21:19	M1D	EET PIT
	Instrumen	t ID: CHICS2100B								
Dissolved	Filtration	Filtration			1.0 mL	250 mL	414063	10/04/22 13:30	HCY	EET PIT
Dissolved	Prep	3005A			25 mL	25 mL	414345	10/06/22 16:00	HCY	EET PIT
Dissolved	Analysis	EPA 6020A		1			415186	10/14/22 13:26	RSK	EET PIT
	Instrumen	t ID: DORY								

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Lab Chronicle

Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Client Sample ID: MW16 (091522)

Date Collected: 09/15/22 12:00 Date Received: 09/17/22 08:55

Lab Sample ID: 180-144683-11

Matrix: Water

Job ID: 180-144683-1

Batch Dil Initial Batch Batch Final Prepared Method **Factor** Number or Analyzed **Prep Type** Type Run **Amount** Amount **Analyst** Lab Total Recoverable 3005A 25 mL 413618 09/29/22 12:30 HCY EET PIT Prep 25 mL Total Recoverable EPA 6020A 414119 10/04/22 14:42 RSK **EET PIT** Analysis 1 Instrument ID: A Total/NA Analysis **EPA 9060A** 1 40 mL 40 mL 414563 10/08/22 18:39 LWM **EET PIT** Instrument ID: SAM

Lab Sample ID: 180-144683-12 Client Sample ID: DUP02 (091522)

Date Collected: 09/15/22 12:00

Matrix: Water

Date Received: 09/17/22 08:55

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis Instrumen	EPA 8260C at ID: CHHP9		5	5 mL	5 mL	412846	09/22/22 15:09	J1T	EET PIT
Total/NA	Analysis Instrumen	EPA 9056A at ID: CHICS2100B		1			412610	09/20/22 21:34	M1D	EET PIT
Dissolved	Filtration	Filtration			1.0 mL	250 mL	414063	10/04/22 13:30	HCY	EET PIT
Dissolved	Prep	3005A			25 mL	25 mL	414345	10/06/22 16:00	HCY	EET PIT
Dissolved	Analysis Instrumen	EPA 6020A at ID: DORY		1			415186	10/14/22 13:30	RSK	EET PIT
Total Recoverable	Prep	3005A			25 mL	25 mL	413336	09/27/22 13:15	HCY	EET PIT
Total Recoverable	Analysis Instrumen	EPA 6020A at ID: DORY		1			414243	10/05/22 18:58	RSK	EET PIT
Total/NA	Analysis Instrumen	EPA 9060A at ID: SAM		1	40 mL	40 mL	414563	10/08/22 19:27	LWM	EET PI

Client Sample ID: MW14(091422) Lab Sample ID: 180-144683-13

Date Collected: 09/14/22 09:25 Date Received: 09/17/22 08:55

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	412846	09/22/22 19:48	J1T	EET PIT
	Instrumer	t ID: CHHP9								

Lab Sample ID: 180-144683-14 Client Sample ID: MW22D(091422)

Date Collected: 09/14/22 10:00 Date Received: 09/17/22 08:55

Batch **Batch** Dil Initial Final **Batch Prepared Prep Type** Type Method Factor Amount Amount Number or Analyzed Run Analyst Lab Total/NA EPA 8260C 412972 09/23/22 10:09 J1T Analysis 5 mL 5 mL **EET PIT** Instrument ID: CHHP9

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Matrix: Water

Project/Site: Cytec Havre de Grace MD

Client Sample ID: MW13D(091422)

Date Collected: 09/14/22 10:55 Date Received: 09/17/22 08:55 Lab Sample ID: 180-144683-15

Matrix: Water

Job ID: 180-144683-1

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	412846	09/22/22 16:35	J1T	EET PIT
	Instrumen	t ID: CHHP9								

Client Sample ID: MW12D(091422)

Date Collected: 09/14/22 11:25 Date Received: 09/17/22 08:55

Lab Sample ID: 180-144683-16

Matrix: Water

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	412837	09/22/22 09:34	J1T	EET PIT
	Instrumer	nt ID: CHHP5								

Client Sample ID: MW12S(091422)

Date Collected: 09/14/22 11:15

Date Received: 09/17/22 08:55

Lab Sample ID: 180-144683-17

Matrix: Water

		Batch	Batch		Dil	Initial	Final	Batch	Prepared		
	Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
	Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	412846	09/22/22 16:56	J1T	EET PIT
١		Instrument	ID: CHHP9								

Client Sample ID: MW28D(091422)

Date Collected: 09/14/22 11:05 Date Received: 09/17/22 08:55

Lab Sample ID: 180-144683-18 **Matrix: Water**

Batch Batch Dil Initial Final Batch Prepared **Prep Type** Method Amount Amount Number or Analyzed Analyst Type Run **Factor** Lab Analysis Total/NA EPA 8260C 412846 09/22/22 17:18 J1T 50 5 mL 5 mL **EET PIT** Instrument ID: CHHP9

Client Sample ID: MW25I(091422)

Date Collected: 09/14/22 11:40 Date Received: 09/17/22 08:55

Lab Sample ID: 180-144683-19 **Matrix: Water**

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	412846	09/22/22 17:39	J1T	EET PIT
	Instrumon	+ ID: CHHD0								

Client Sample ID: MW-4(091422)

Lab Sample ID: 180-144683-20 Date Collected: 09/14/22 11:50 **Matrix: Water**

Date Received: 09/17/22 08:55

Bron Type	Batch	Batch Method	Bun	Dil	Initial	Final	Batch Number	Prepared or Analyzed	Analyst	l ab
Prep Type Total/NA	Type Analysis	EPA 8260C	Run	Factor 1	Amount 5 mL	Amount 5 mL	412846	09/22/22 18:01		- Lab EET PIT
	Instrumer	t ID: CHHP9								

Project/Site: Cytec Havre de Grace MD

Client Sample ID: MW-6I(091422)

Date Collected: 09/14/22 12:00 Date Received: 09/17/22 08:55

Client: ARCADIS U.S., Inc.

Lab Sample ID: 180-144683-21

Matrix: Water

Batch Dil Initial Batch Batch Final **Prepared** Method **Factor Prep Type** Type Run **Amount** Amount Number or Analyzed **Analyst** Lab Total/NA **EPA 8260C** 412846 09/22/22 15:30 EET PIT Analysis 5 5 mL 5 mL J1T Instrument ID: CHHP9 Total/NA Analysis **EPA 8260C** DL 50 5 mL 5 mL 412846 09/22/22 20:31 J1T **EET PIT** Instrument ID: CHHP9

Client Sample ID: MW8S(091422)

Date Collected: 09/14/22 10:30 Date Received: 09/17/22 08:55

Lab Sample ID: 180-144683-22

Matrix: Water

Batch Batch Batch Dil Initial Final **Prepared** Method or Analyzed **Prep Type** Type Run **Factor Amount** Amount Number **Analyst** Total/NA 412846 09/22/22 18:22 J1T EET PIT Analysis **EPA 8260C** 5 mL 5 mL Instrument ID: CHHP9

Client Sample ID: MW8D(091422)

Date Collected: 09/14/22 10:40

Lab Sample ID: 180-144683-23

Lab Sample ID: 180-144683-24

Matrix: Water

Matrix: Water

Matrix: Water

Date Received: 09/17/22 08:55

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	412846	09/22/22 18:43	J1T	EET PIT
	Instrumer	nt ID: CHHP9								

Client Sample ID: TRIP BLANK

Date Collected: 09/14/22 00:00

Date Received: 09/17/22 08:55

_										
	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	EPA 8260C		1	5 mL	5 mL	412846	09/22/22 19:05	J1T	EET PIT

Client Sample ID: TRIP BLANK

Date Collected: 09/14/22 00:00

Date Received: 09/17/22 08:55

Client Sam	ple ID: TRI	P BLANK			Lab Sample ID: 180-144683-29					
	Instrumen	it ID: CHHP9								
Total/NA	Analysis	EPA 8260C	1	5 mL	5 mL	412846	09/22/22 19:05	J1T	EET PIT	

Batch Batch Dil Initial Final Batch Prepared Amount Method Number or Analyzed **Prep Type** Type **Factor** Amount Analyst Run Lab Total/NA Analysis **EPA 8260C** 5 mL 5 mL 412846 09/22/22 19:26 J1T **EET PIT** Instrument ID: CHHP9

Laboratory References:

EET PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Lab Chronicle

Client: ARCADIS U.S., Inc. Job ID: 180-144683-1

Project/Site: Cytec Havre de Grace MD

Analyst References:

Lab: EET PIT

Batch Type: Filtration

HCY = Harrison Yaeger

Batch Type: Prep

HCY = Harrison Yaeger

Batch Type: Analysis

J1T = Jianwu Tang

LWM = Leslie McIntire

M1D = Maureen Donlin

RSK = Robert Kurtz

2

Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Client Sample ID: DUP01 (091422)

Date Collected: 09/14/22 12:00 Date Received: 09/17/22 08:55 Lab Sample ID: 180-144683-1

Matrix: Water

Job ID: 180-144683-1

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND	1.0	0.45	ug/L			09/22/22 10:44	1
1,2-Dichloroethane	ND	1.0	0.57	ug/L			09/22/22 10:44	1
Chloroform	ND	1.0	0.60	ug/L			09/22/22 10:44	1
Chloroethane	ND	1.0	0.90	ug/L			09/22/22 10:44	1
Methylene Chloride	ND	1.0	0.89	ug/L			09/22/22 10:44	1
Tetrachloroethene	ND	1.0	0.47	ug/L			09/22/22 10:44	1
Trichloroethene	ND	1.0	0.69	ug/L			09/22/22 10:44	1
Vinyl chloride	ND	1.0	0.41	ug/L			09/22/22 10:44	1
Carbon disulfide	ND	1.0	0.88	ug/L			09/22/22 10:44	1
cis-1,2-Dichloroethene	ND	1.0	0.71	ug/L			09/22/22 10:44	1
Surrogate	%Recovery Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	80		26 - 156	$\overline{}$	9/22/22 10:44	1
4-Bromofluorobenzene (Surr)	99		36 - 124	0	9/22/22 10:44	1
Dibromofluoromethane (Surr)	84		46 - 149	0	9/22/22 10:44	1
Toluene-d8 (Surr)	104		40 - 146	0	9/22/22 10:44	1

Client Sample ID: MW18 (091522)_24

Date Collected: 09/15/22 08:10 Date Received: 09/17/22 08:55 Lab Sample ID: 180-144683-2

Matrix: Water

Method: SW846 EPA 8260C - Volatile Organic Compounds (GC/MS)

Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ND ND	1.0	0.45	ug/L			09/22/22 16:36	1
ND	1.0	0.57	ug/L			09/22/22 16:36	1
ND	1.0	0.60	ug/L			09/22/22 16:36	1
ND	1.0	0.90	ug/L			09/22/22 16:36	1
ND	1.0	0.89	ug/L			09/22/22 16:36	1
ND	1.0	0.47	ug/L			09/22/22 16:36	1
ND	1.0	0.69	ug/L			09/22/22 16:36	1
ND	1.0	0.41	ug/L			09/22/22 16:36	1
ND	1.0	0.88	ug/L			09/22/22 16:36	1
ND	1.0	0.71	ug/L			09/22/22 16:36	1
	ND N	ND 1.0	ND 1.0 0.45 ND 1.0 0.57 ND 1.0 0.60 ND 1.0 0.90 ND 1.0 0.89 ND 1.0 0.47 ND 1.0 0.69 ND 1.0 0.41 ND 1.0 0.88	ND 1.0 0.45 ug/L ND 1.0 0.57 ug/L ND 1.0 0.60 ug/L ND 1.0 0.90 ug/L ND 1.0 0.89 ug/L ND 1.0 0.47 ug/L ND 1.0 0.69 ug/L ND 1.0 0.41 ug/L ND 1.0 0.88 ug/L	ND 1.0 0.45 ug/L ND 1.0 0.57 ug/L ND 1.0 0.60 ug/L ND 1.0 0.90 ug/L ND 1.0 0.89 ug/L ND 1.0 0.47 ug/L ND 1.0 0.69 ug/L ND 1.0 0.41 ug/L ND 1.0 0.88 ug/L	ND 1.0 0.45 ug/L ND 1.0 0.57 ug/L ND 1.0 0.60 ug/L ND 1.0 0.90 ug/L ND 1.0 0.89 ug/L ND 1.0 0.47 ug/L ND 1.0 0.69 ug/L ND 1.0 0.41 ug/L ND 1.0 0.88 ug/L	ND 1.0 0.45 ug/L 09/22/22 16:36 ND 1.0 0.57 ug/L 09/22/22 16:36 ND 1.0 0.60 ug/L 09/22/22 16:36 ND 1.0 0.90 ug/L 09/22/22 16:36 ND 1.0 0.89 ug/L 09/22/22 16:36 ND 1.0 0.47 ug/L 09/22/22 16:36 ND 1.0 0.69 ug/L 09/22/22 16:36 ND 1.0 0.41 ug/L 09/22/22 16:36 ND 1.0 0.41 ug/L 09/22/22 16:36 ND 1.0 0.88 ug/L 09/22/22 16:36

Surrogate	%Recovery Qua	ıalifier Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90	26 - 156		09/22/22 16:36	1
4-Bromofluorobenzene (Surr)	98	36 - 124		09/22/22 16:36	1
Dibromofluoromethane (Surr)	89	46 - 149		09/22/22 16:36	1
Toluene-d8 (Surr)	102	40 - 146		09/22/22 16:36	1

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	14	F1	1.0	0.76	mg/L			09/20/22 18:06	1

Method: SW846 EPA 6020A - N	letals (ICP/MS)	- Total Recoverable
-----------------------------	-----------------	---------------------

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Iron	35000	50	28 ug/L		09/26/22 11:10	10/04/22 18:22	1

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Iron	33 J	50	28 ug/L	:	10/06/22 16:00	10/14/22 12:50	1

Project/Site: Cytec Havre de Grace MD

Client Sample ID: MW18 (091522)_24

Lab Sample ID: 180-144683-2 Date Collected: 09/15/22 08:10

Matrix: Water

Date Received: 09/17/22 08:55

Client: ARCADIS U.S., Inc.

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad (SW846	4.9		1.0	0.51	mg/L			10/08/22 10:53	1
EPA 9060A)									

Lab Sample ID: 180-144683-3 Client Sample ID: MW18 (091522)_31

Date Collected: 09/15/22 08:20 **Matrix: Water**

Date Received: 09/17/22 08:55

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			09/22/22 17:00	1
1,2-Dichloroethane	1.0		1.0	0.57	ug/L			09/22/22 17:00	1
Chloroform	ND		1.0	0.60	ug/L			09/22/22 17:00	1
Chloroethane	ND		1.0	0.90	ug/L			09/22/22 17:00	1
Methylene Chloride	ND		1.0	0.89	ug/L			09/22/22 17:00	1
Tetrachloroethene	ND		1.0	0.47	ug/L			09/22/22 17:00	1
Trichloroethene	ND		1.0	0.69	ug/L			09/22/22 17:00	1
Vinyl chloride	ND		1.0	0.41	ug/L			09/22/22 17:00	1
Carbon disulfide	ND		1.0	0.88	ug/L			09/22/22 17:00	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			09/22/22 17:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		26 - 156			-		09/22/22 17:00	1
4-Bromofluorobenzene (Surr)	91		36 - 124					09/22/22 17:00	1
Dibromofluoromethane (Surr)	87		46 - 149					09/22/22 17:00	1
Toluene-d8 (Surr)	97		40 - 146					09/22/22 17:00	1

Method: SW846 EPA 9056A - Ai	nions, Ion Chromatogra	apny					
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	14	1.0	0.76 mg/L			09/20/22 18:50	1

Method: SW846 EPA 6020A - N	lletals (ICP/MS) - Total Re	ecoverable	•				
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Iron	16000	50	28 ug/L		09/26/22 11:10	10/04/22 18:25	1

Method: SW846 EPA 6020A - I	Metals (ICP/MS) - [Dissolved						
Analyte	Result Qualifie	er RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	63	50	28	ug/L		10/06/22 16:00	10/14/22 12:53	1

General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad (SW846	4.3		1.0	0.51	mg/L			10/08/22 12:59	1

Lab Sample ID: 180-144683-4 **Client Sample ID: MW27 (091522) Matrix: Water**

Date Collected: 09/15/22 07:45 Date Received: 09/17/22 08:55

Method: SW846 EPA 8260	C - Volatile Organic Compo	unds (GC/N	/IS)					
Analyte	Result Qualifier	RL	MDL U	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	2.2	1.0	0.45 u	ug/L			09/22/22 17:23	1
1,2-Dichloroethane	3.0	1.0	0.57 u	ug/L			09/22/22 17:23	1
Chloroform	ND	1.0	0.60 u	ug/L			09/22/22 17:23	1

Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Client Sample ID: MW27 (091522)

Date Collected: 09/15/22 07:45 Date Received: 09/17/22 08:55 Lab Sample ID: 180-144683-4

Matrix: Water

Job ID: 180-144683-1

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	5.4	1.0	0.90	ug/L			09/22/22 17:23	1
Methylene Chloride	ND	1.0	0.89	ug/L			09/22/22 17:23	1
Tetrachloroethene	ND	1.0	0.47	ug/L			09/22/22 17:23	1
Trichloroethene	5.9	1.0	0.69	ug/L			09/22/22 17:23	1
Vinyl chloride	5.7	1.0	0.41	ug/L			09/22/22 17:23	1
Carbon disulfide	ND	1.0	0.88	ug/L			09/22/22 17:23	1
cis-1,2-Dichloroethene	4.5	1.0	0.71	ug/L			09/22/22 17:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86	·	26 - 156		09/22/22 17:23	1
4-Bromofluorobenzene (Surr)	95		36 - 124		09/22/22 17:23	1
Dibromofluoromethane (Surr)	86		46 - 149		09/22/22 17:23	1
Toluene-d8 (Surr)	100		40 - 146		09/22/22 17:23	1

Method: SW846 EPA 9056A - A	Anions, Ion (Chromatogr	aphy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	2.3		1.0	0.76	mg/L			09/20/22 19:05	1

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	22000	50	28	ug/L		09/26/22 11:10	10/04/22 18:29	1

Welliou. Swo46 EPA 6020A - N	ietais (ICP/IVIS) - DISSUIT	veu					
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Iron	530	50	28 ug/L		10/06/22 16:00	10/14/22 12:56	1

General Chemistry	D	0	D.	MDI	1114		D	Anabasal	D'' F
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad (SW846	0.68	J	1.0	0.51	mg/L			10/08/22 13:46	1
_EPA 9060A)									

Client Sample ID: MW14I (091522)

Dibromofluoromethane (Surr)

Lab Sample ID: 180-144683-5 Date Collected: 09/15/22 08:30 **Matrix: Water** Date Received: 09/17/22 08:55

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			09/22/22 17:47	1
1,2-Dichloroethane	5.3		1.0	0.57	ug/L			09/22/22 17:47	1
Chloroform	ND		1.0	0.60	ug/L			09/22/22 17:47	1
Chloroethane	ND		1.0	0.90	ug/L			09/22/22 17:47	1
Methylene Chloride	ND		1.0	0.89	ug/L			09/22/22 17:47	1
Tetrachloroethene	ND		1.0	0.47	ug/L			09/22/22 17:47	1
Trichloroethene	ND		1.0	0.69	ug/L			09/22/22 17:47	1
Vinyl chloride	ND		1.0	0.41	ug/L			09/22/22 17:47	1
Carbon disulfide	ND		1.0	0.88	ug/L			09/22/22 17:47	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			09/22/22 17:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		26 - 156					09/22/22 17:47	1
4-Bromofluorobenzene (Surr)	98		36 - 124					09/22/22 17:47	1

Eurofins Pittsburgh

09/22/22 17:47

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Client: ARCADIS U.S., Inc. Job ID: 180-144683-1

Project/Site: Cytec Havre de Grace MD

Client Sample ID: MW14I (091522)

Date Collected: 09/15/22 08:30 Date Received: 09/17/22 08:55 Lab Sample ID: 180-144683-5

Matrix: Water

Method: SW846 EPA 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	103		40 - 146		09/22/22 17:47	1

	Method: SW846 EPA 9056A -	Anions, Ion Chromatography
п		

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	54		1.0	0.76	mg/L			09/20/22 19:20	1

Method: SW846 EPA	6020A - Motale	(ICD/MQ)	- Total Recoverable
MICHIGA. SYVOTO LI A	UUZUA - MELAIS		- IUlai Necoverable

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	20000	50	28	ug/L		09/26/22 11:10	10/04/22 18:32	1

Method: SW846 EPA 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		50	28	ug/L		10/06/22 16:00	10/14/22 13:00	1

General Chemistry

Ocheral Ohennony								
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad (SW846	1.9	1.0	0.51	mg/L			10/08/22 14:34	1
FPA 9060A)								

Client Sample ID: MW23 (091522)_40

Lab Sample ID: 180-144683-6 Date Collected: 09/15/22 09:00 **Matrix: Water** Date Received: 09/17/22 08:55

Method: SW846 EPA 8260C	- Volatile (Organic	c Compounds	(GC/MS))
	_				

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			09/23/22 09:47	1
1,2-Dichloroethane	11		1.0	0.57	ug/L			09/23/22 09:47	1
Chloroform	ND		1.0	0.60	ug/L			09/23/22 09:47	1
Chloroethane	2.0		1.0	0.90	ug/L			09/23/22 09:47	1
Methylene Chloride	ND		1.0	0.89	ug/L			09/23/22 09:47	1
Tetrachloroethene	ND		1.0	0.47	ug/L			09/23/22 09:47	1
Trichloroethene	ND		1.0	0.69	ug/L			09/23/22 09:47	1
Vinyl chloride	ND		1.0	0.41	ug/L			09/23/22 09:47	1
Carbon disulfide	ND		1.0	0.88	ug/L			09/23/22 09:47	1
cis-1,2-Dichloroethene	0.86	J	1.0	0.71	ug/L			09/23/22 09:47	1

Surrogate	%Recovery Qua	alifier Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100	26 - 156		09/23/22 09:47	1
4-Bromofluorobenzene (Surr)	88	36 - 124		09/23/22 09:47	1
Dibromofluoromethane (Surr)	97	46 - 149		09/23/22 09:47	1
Toluene-d8 (Surr)	102	40 - 146		09/23/22 09:47	1

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac	
Sulfate	57	1.0	0.76 mg/L			09/20/22 19:35	1	

ı			
	Method: SW846 EPA 6020A - Metals	(ICP/MS)	- Total Recoverable
	Wethou. Offoro El A 0020A - Wetais		- Iotal Necoverable

WELLIOU. SWOTO LFA OUZUA - II							
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Iron	10000	50	28 ug/L		09/26/22 11:10	10/04/22 18:36	1

Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Client Sample ID: MW23 (091522)_40

Date Collected: 09/15/22 09:00 Date Received: 09/17/22 08:55 Lab Sample ID: 180-144683-6

Matrix: Water

Job ID: 180-144683-1

Method: SW846 EPA 6020A	- Metals	(ICP/MS) - Dissolved
Amalusta	- п		alifia.

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		50	28	ug/L		10/06/22 16:00	10/14/22 13:03	1
_									

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D)	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad (SW846	0.96	J	1.0	0.51	mg/L			_	10/08/22 14:58	1
_EPA 9060A)										

Client Sample ID: MW23 (091522)_47

Date Collected: 09/15/22 09:10 Date Received: 09/17/22 08:55

Lab Sample ID: 180-144683-7

Matrix: Water

Method: SW846 EPA 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND ND	1.0	0.45	ug/L			09/23/22 11:13	1
1,2-Dichloroethane	9.5	1.0	0.57	ug/L			09/23/22 11:13	1
Chloroform	ND	1.0	0.60	ug/L			09/23/22 11:13	1
Chloroethane	3.0	1.0	0.90	ug/L			09/23/22 11:13	1
Methylene Chloride	ND	1.0	0.89	ug/L			09/23/22 11:13	1
Tetrachloroethene	ND	1.0	0.47	ug/L			09/23/22 11:13	1
Trichloroethene	ND	1.0	0.69	ug/L			09/23/22 11:13	1
Vinyl chloride	ND	1.0	0.41	ug/L			09/23/22 11:13	1
Carbon disulfide	ND	1.0	0.88	ug/L			09/23/22 11:13	1
cis-1,2-Dichloroethene	0.89 J	1.0	0.71	ug/L			09/23/22 11:13	1

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98	26 - 156		09/23/22 11:13	1
4-Bromofluorobenzene (Surr)	87	36 - 124		09/23/22 11:13	1
Dibromofluoromethane (Surr)	92	46 - 149		09/23/22 11:13	1
Toluene-d8 (Surr)	102	40 - 146		09/23/22 11:13	1

Method: SW846 EPA 9056A	- Anions, Ion Chromatography

Analyte		alifier RL	MDL	Unit I	D	Prepared	Analyzed	Dil Fac	
Sulfate	59	1.0	0.76	mg/L			09/20/22 19:50	1	

Method: SW846 EPA	6020A - Metals	(ICP/MS)	- Total	Recoverable

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Iron	12000	50	28 ug/L		09/26/22 11:10	10/04/22 18:39	1

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac	
Iron	47 J	50	28 ua/L		10/06/22 16:00	10/14/22 13:06	1	

General Chemistry

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad (SW846	0.92 J	1.0	0.51 mg/L			10/08/22 15:22	1

EPA 9060A)

Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Client Sample ID: MW19DI (091522)

Date Collected: 09/15/22 09:30 Date Received: 09/17/22 08:55 Lab Sample ID: 180-144683-8

Matrix: Water

Job ID: 180-144683-1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	MD		1.0	0.45	ug/L			09/23/22 14:47	1
Chloroform	ND		1.0	0.60	ug/L			09/23/22 14:47	1
Chloroethane	ND		1.0	0.90	ug/L			09/23/22 14:47	1
Methylene Chloride	ND		1.0	0.89	ug/L			09/23/22 14:47	1
Tetrachloroethene	ND		1.0	0.47	ug/L			09/23/22 14:47	1
Trichloroethene	ND		1.0	0.69	ug/L			09/23/22 14:47	1
Vinyl chloride	ND		1.0	0.41	ug/L			09/23/22 14:47	1
Carbon disulfide	ND		1.0	0.88	ug/L			09/23/22 14:47	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			09/23/22 14:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		26 - 156					09/23/22 14:47	1
4-Bromofluorobenzene (Surr)	74		36 - 124					09/23/22 14:47	1
Dibromofluoromethane (Surr)	83		46 - 149					09/23/22 14:47	1
Toluene-d8 (Surr)	95		40 - 146					09/23/22 14:47	1

Method: SW846 EPA 82600	_		•	•		_			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	52		5.0	2.9	ug/L			09/23/22 16:34	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		26 - 156					09/23/22 16:34	5
4-Bromofluorobenzene (Surr)	82		36 - 124					09/23/22 16:34	5
Dibromofluoromethane (Surr)	88		46 - 149					09/23/22 16:34	5
Toluene-d8 (Surr)	100		40 - 146					09/23/22 16:34	5

 Method: SW846 EPA 9056A - A	nions, lon	Chromatogr	aphy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	29		1.0	0.76	mg/L			09/20/22 20:34	1

Method: SW846 EPA 6020A - M	etals (ICP/MS) - Total R	ecoverable	€				
Analyte	Result Qualifier	RL	MDL Un	nit D	Prepared	Analyzed	Dil Fac
Iron	22000	50	28 ug	g/L	09/29/22 12:30	10/04/22 14:31	1

Method: SW846 EPA 6020A -	Metals (ICP/MS) - Di	issolved						
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND	50	28	ug/L		10/06/22 16:00	10/14/22 13:10	1
General Chemistry								

Ocheral Offermony							
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad (SW846	1.0	1.0	0.51 mg/L			10/08/22 15:46	1
FPA 9060A)							

Lab Sample ID: 180-144683-9 Client Sample ID: MW20DI (091522) **Matrix: Water**

Date Collected: 09/15/22 09:50 Date Received: 09/17/22 08:55

Method: SW846 EPA 8260	C - Volatile Organic Comp	ounds (GC/N	/IS)					
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND ND	1.0	0.45	ug/L			09/23/22 12:17	1
1,2-Dichloroethane	ND	1.0	0.57 t	ug/L			09/23/22 12:17	1
Chloroform	ND	1.0	0.60	ug/L			09/23/22 12:17	1

2

Client: ARCADIS U.S., Inc.

Result Qualifier

0.99 J

Project/Site: Cytec Havre de Grace MD

Client Sample ID: MW20DI (091522)

Date Collected: 09/15/22 09:50 Date Received: 09/17/22 08:55 Lab Sample ID: 180-144683-9

Matrix: Water

Job ID: 180-144683-1

Method: SW846 EPA 8260C	- Volatile Org	anic Comp	oounds (GC/N	/IS) (Coi	ntinued)				
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		1.0	0.90	ug/L			09/23/22 12:17	1
Methylene Chloride	ND		1.0	0.89	ug/L			09/23/22 12:17	1
Tetrachloroethene	ND		1.0	0.47	ug/L			09/23/22 12:17	1
Trichloroethene	ND		1.0	0.69	ug/L			09/23/22 12:17	1
Vinyl chloride	ND		1.0	0.41	ug/L			09/23/22 12:17	1
Carbon disulfide	ND		1.0	0.88	ug/L			09/23/22 12:17	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			09/23/22 12:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		26 - 156					09/23/22 12:17	1
4-Bromofluorobenzene (Surr)	89		36 - 124					09/23/22 12:17	1
Dibromofluoromethane (Surr)	94		46 - 149					09/23/22 12:17	1
Toluene-d8 (Surr)	101		40 - 146					09/23/22 12:17	1
Method: SW846 EPA 9056A	- Anions, Ion	Chromato	graphy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	17		1.0	0.76	mg/L			09/20/22 20:49	1
Method: SW846 EPA 6020A	- Metals (ICP/	MS) - Tota	l Recoverable	9					
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	36000		50	28	ug/L		09/29/22 12:30	10/04/22 14:35	1
Method: SW846 EPA 6020A	- Metals (ICP/	MS) - Diss	olved						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		50	28	ug/L		10/06/22 16:00	10/14/22 13:13	1

Client Sample ID: MW3 (091522)

Date Collected: 09/15/22 10:45 Date Received: 09/17/22 08:55

Total Organic Carbon - Quad (SW846

General Chemistry

EPA 9060A)

Lab Sample ID: 180-144683-10

Analyzed

10/08/22 16:10

Prepared

Matrix: Water

Dil Fac

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		10	4.5	ug/L			09/23/22 11:34	10
1,2-Dichloroethane	34		10	5.7	ug/L			09/23/22 11:34	10
Chloroform	ND		10	6.0	ug/L			09/23/22 11:34	10
Chloroethane	ND		10	9.0	ug/L			09/23/22 11:34	10
Methylene Chloride	27		10	8.9	ug/L			09/23/22 11:34	10
Tetrachloroethene	ND		10	4.7	ug/L			09/23/22 11:34	10
Trichloroethene	ND		10	6.9	ug/L			09/23/22 11:34	10
Vinyl chloride	91		10	4.1	ug/L			09/23/22 11:34	10
Carbon disulfide	ND		10	8.8	ug/L			09/23/22 11:34	10
cis-1,2-Dichloroethene	ND		10	7.1	ug/L			09/23/22 11:34	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		26 - 156					09/23/22 11:34	10
4-Bromofluorobenzene (Surr)	85		36 - 124					09/23/22 11:34	10
Dibromofluoromethane (Surr)	87		46 - 149					09/23/22 11:34	10

RL

1.0

MDL Unit

0.51 mg/L

Client: ARCADIS U.S., Inc. Project/Site: Cytec Havre de Grace MD

Client Sample ID: MW3 (091522)

Date Collected: 09/15/22 10:45 Date Received: 09/17/22 08:55

Lab Sample ID: 180-144683-10

Matrix: Water

Method: SW846 EPA 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	106		40 - 146		09/23/22 11:34	10

Method: SW846 EPA 9056A - A	Anions, Ion	Chromato	graphy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Di
Sulfate	2.1		1.0	0.76	mg/L			09/20/22 21:04	

Method: SW846 EPA 6020A - N	Metals (ICP/MS) - Total F	Recoverable)				
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Iron	1900	50	28 ug/L		09/29/22 12:30	10/04/22 14:38	1

Method: SW846 EPA 6020A - N									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		50	28	ug/L		10/06/22 16:00	10/14/22 13:16	1

General Chemistry						_	_		
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad (SW846	0.94	J	1.0	0.51	mg/L			10/08/22 16:33	1
EPA 9060A)									

Lab Sample ID: 180-144683-11 **Client Sample ID: MW16 (091522)** Date Collected: 09/15/22 12:00 **Matrix: Water**

Date Received: 09/17/22 08:55

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND ND	1.0	0.45	ug/L			09/23/22 11:56	1
1,2-Dichloroethane	ND	1.0	0.57	ug/L			09/23/22 11:56	1
Chloroform	ND	1.0	0.60	ug/L			09/23/22 11:56	1
Chloroethane	ND	1.0	0.90	ug/L			09/23/22 11:56	1
Methylene Chloride	ND	1.0	0.89	ug/L			09/23/22 11:56	1
Tetrachloroethene	ND	1.0	0.47	ug/L			09/23/22 11:56	1
Trichloroethene	3.7	1.0	0.69	ug/L			09/23/22 11:56	1
Vinyl chloride	4.6	1.0	0.41	ug/L			09/23/22 11:56	1
Carbon disulfide	ND	1.0	0.88	ug/L			09/23/22 11:56	1
cis-1,2-Dichloroethene	6.7	1.0	0.71	ug/L			09/23/22 11:56	1

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103	26 - 156		09/23/22 11:56	1
4-Bromofluorobenzene (Surr)	89	36 - 124		09/23/22 11:56	1
Dibromofluoromethane (Surr)	96	46 - 149		09/23/22 11:56	1
Toluene-d8 (Surr)	99	40 - 146		09/23/22 11:56	1

Method: SW846 EPA 9056A - Anions, Ion Chromatography										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Sulfate	6.8		1.0	0.76	mg/L			09/20/22 21:19	1	

Method: SW846 EPA 6020A - N	Metals (ICP/N	/IS) - Total	Recovera	ble					
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	9900		50	28	ug/L		09/29/22 12:30	10/04/22 14:42	1

Client: ARCADIS U.S., Inc. Project/Site: Cytec Havre de Grace MD

Client Sample ID: MW16 (091522)

Date Collected: 09/15/22 12:00

Lab Sample ID: 180-144683-11

Matrix: Water

Date Received: 09/17/22 08:55

Method: SW846 EPA 6020A - M	letals (ICP/	MS) - Disso	lved						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		50	28	ug/L		10/06/22 16:00	10/14/22 13:26	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad (SW846 EPA 9060A)	1.3		1.0	0.51	mg/L			10/08/22 18:39	1

Client Sample ID: DUP02 (091522)

Date Collected: 09/15/22 12:00

Date Received: 09/17/22 08:55

Analyte

EPA 9060A)

Total Organic Carbon - Quad (SW846

Lab	Samp	le ID): 1	80-	14	468	33-	12

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		5.0	2.3	ug/L			09/22/22 15:09	
1,2-Dichloroethane	38		5.0	2.9	ug/L			09/22/22 15:09	5
Chloroform	ND		5.0	3.0	ug/L			09/22/22 15:09	5
Chloroethane	ND		5.0	4.5	ug/L			09/22/22 15:09	5
Methylene Chloride	31		5.0	4.4	ug/L			09/22/22 15:09	5
Tetrachloroethene	ND		5.0	2.3	ug/L			09/22/22 15:09	5
Trichloroethene	ND		5.0	3.4	ug/L			09/22/22 15:09	5
Vinyl chloride	100		5.0	2.0	ug/L			09/22/22 15:09	5
Carbon disulfide	ND		5.0	4.4	ug/L			09/22/22 15:09	5
cis-1,2-Dichloroethene	ND		5.0	3.5	ug/L			09/22/22 15:09	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		26 - 156					09/22/22 15:09	5
4-Bromofluorobenzene (Surr)	88		36 - 124					09/22/22 15:09	5
Dibromofluoromethane (Surr)	92		46 - 149					09/22/22 15:09	5
Toluene-d8 (Surr)	108		40 - 146					09/22/22 15:09	5
Method: SW846 EPA 9056	A - Anions, Ion	Chromato	graphy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	2.1		1.0	0.76	mg/L			09/20/22 21:34	1
Method: SW846 EPA 6020	A - Metals (ICP/	MS) - Tota	l Recoverable)					
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	4800		50	28	ug/L		09/27/22 13:15	10/05/22 18:58	1
Method: SW846 EPA 6020	A - Metals (ICP/	MS) - Diss	olved						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
, , to									

Analyzed

10/08/22 19:27

RL

1.0

MDL Unit

0.51 mg/L

Prepared

Result Qualifier

0.91 J

2

Job ID: 180-144683-1

Client: ARCADIS U.S., Inc. Project/Site: Cytec Havre de Grace MD

Client Sample ID: MW14(091422)

Lab Sample ID: 180-144683-13

Matrix: Water

Date Collected: 09/14/22 09:25 Date Received: 09/17/22 08:55

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND ND	1.0	0.45	ug/L			09/22/22 19:48	1
1,2-Dichloroethane	3.0	1.0	0.57	ug/L			09/22/22 19:48	1
Chloroform	ND	1.0	0.60	ug/L			09/22/22 19:48	1
Chloroethane	ND	1.0	0.90	ug/L			09/22/22 19:48	1
Methylene Chloride	ND	1.0	0.89	ug/L			09/22/22 19:48	1
Tetrachloroethene	ND	1.0	0.47	ug/L			09/22/22 19:48	1
Trichloroethene	ND	1.0	0.69	ug/L			09/22/22 19:48	1
Vinyl chloride	ND	1.0	0.41	ug/L			09/22/22 19:48	1
Carbon disulfide	ND	1.0	0.88	ug/L			09/22/22 19:48	1
cis-1,2-Dichloroethene	ND	1.0	0.71	ug/L			09/22/22 19:48	1
Surrogate	%Recovery Qualifier	Limits				Prepared	Analyzed	Dil Fac
					-			

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		26 - 156	$\overline{}$	09/22/22 19:48	1
4-Bromofluorobenzene (Surr)	87		36 - 124	C	09/22/22 19:48	1
Dibromofluoromethane (Surr)	85		46 - 149	C	09/22/22 19:48	1
Toluene-d8 (Surr)	103		40 - 146	C	09/22/22 19:48	1

Client Sample ID: MW22D(091422)

Date Collected: 09/14/22 10:00 Date Received: 09/17/22 08:55 Lab Sample ID: 180-144683-14

Matrix: Water

Method: SW846 EPA 8260C - Volatile Organic Compounds (GC/MS)

	Tolutio O. g.			,					
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			09/23/22 10:09	1
1,2-Dichloroethane	0.65	J	1.0	0.57	ug/L			09/23/22 10:09	1
Chloroform	ND		1.0	0.60	ug/L			09/23/22 10:09	1
Chloroethane	ND		1.0	0.90	ug/L			09/23/22 10:09	1
Methylene Chloride	ND		1.0	0.89	ug/L			09/23/22 10:09	1
Tetrachloroethene	ND		1.0	0.47	ug/L			09/23/22 10:09	1
Trichloroethene	ND		1.0	0.69	ug/L			09/23/22 10:09	1
Vinyl chloride	ND		1.0	0.41	ug/L			09/23/22 10:09	1
Carbon disulfide	ND		1.0	0.88	ug/L			09/23/22 10:09	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			09/23/22 10:09	1

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93	26 - 156		09/23/22 10:09	1
4-Bromofluorobenzene (Surr)	87	36 - 124		09/23/22 10:09	1
Dibromofluoromethane (Surr)	89	46 - 149		09/23/22 10:09	1
Toluene-d8 (Surr)	108	40 - 146		09/23/22 10:09	1

Client Sample ID: MW13D(091422)

Date Collected: 09/14/22 10:55

Date Received: 09/17/22 08:55

Lab Sample ID: 180-144683-15

Matrix: Water

Method: SW846 EPA 8260C - Volatile Organic Compounds (GC/MS)

Method: 344046 EPA 6260C - V	olatile Orga	mic Compou	mas (GC/IVI	1 3)					
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			09/22/22 16:35	1
1,2-Dichloroethane	22		1.0	0.57	ug/L			09/22/22 16:35	1
Chloroform	ND		1.0	0.60	ug/L			09/22/22 16:35	1
Chloroethane	ND		1.0	0.90	ug/L			09/22/22 16:35	1
Methylene Chloride	ND		1.0	0.89	ug/L			09/22/22 16:35	1

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10

12

Dil Fac

Matrix: Water

Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Client Sample ID: MW13D(091422)

Date Collected: 09/14/22 10:55 Date Received: 09/17/22 08:55

Lab Sample ID: 180-144683-15

Matrix: Water

09/22/22 16:35

Lab Sample ID: 180-144683-16

Method: SW846 EPA 826	Method: SW846 EPA 8260C - Volatile Organic Compounds (GC/MS) (Continued)											
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed				
Tetrachloroethene	0.79	J	1.0	0.47	ug/L			09/22/22 16:35				
Trichloroethene	3.0		1.0	0.69	ug/L			09/22/22 16:35				
Vinyl chloride	ND		1.0	0.41	ug/L			09/22/22 16:35				
Carbon disulfide	ND		1.0	0.88	ug/L			09/22/22 16:35				

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93	26 - 156		09/22/22 16:35	1
4-Bromofluorobenzene (Surr)	85	36 - 124		09/22/22 16:35	1
Dibromofluoromethane (Surr)	85	46 - 149		09/22/22 16:35	1
Toluene-d8 (Surr)	98	40 - 146		09/22/22 16:35	1

1.0

0.71 ug/L

Client Sample ID: MW12D(091422)

Date Collected: 09/14/22 11:25

Date Received: 09/17/22 08:55

cis-1,2-Dichloroethene

ND

Method: SW846 EPA 8260C - Volatile Organic Compounds (GC/MS)									
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
1,1,2-Trichloroethane	ND ND	1.0	0.45	ug/L			09/22/22 09:34	1	
1,2-Dichloroethane	ND	1.0	0.57	ug/L			09/22/22 09:34	1	
Chloroform	ND	1.0	0.60	ug/L			09/22/22 09:34	1	
Chloroethane	ND	1.0	0.90	ug/L			09/22/22 09:34	1	
Methylene Chloride	ND	1.0	0.89	ug/L			09/22/22 09:34	1	
Tetrachloroethene	ND	1.0	0.47	ug/L			09/22/22 09:34	1	
Trichloroethene	ND	1.0	0.69	ug/L			09/22/22 09:34	1	
Vinyl chloride	ND	1.0	0.41	ug/L			09/22/22 09:34	1	
Carbon disulfide	ND	1.0	0.88	ug/L			09/22/22 09:34	1	
cis-1,2-Dichloroethene	ND	1.0	0.71	ug/L			09/22/22 09:34	1	

Surrogate	%Recovery Qualifie	r Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90	26 - 156		09/22/22 09:34	1
4-Bromofluorobenzene (Surr)	104	36 - 124		09/22/22 09:34	1
Dibromofluoromethane (Surr)	89	46 - 149		09/22/22 09:34	1
Toluene-d8 (Surr)	107	40 - 146		09/22/22 09:34	1

Client Sample ID: MW12S(091422)

Date Collected: 09/14/22 11:15 Date Received: 09/17/22 08:55 Lab Sample ID: 180-144683-17

Matrix: Water

Method: SW846 EPA 8260	: - Volatile Organic	Compounds (GC/N	IS)
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Method: SW846 EPA 8260 Analyte	C - Volatile Organic Comp Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND ND	1.0	0.45	ug/L		-	09/22/22 16:56	1
1,2-Dichloroethane	ND	1.0	0.57	ug/L			09/22/22 16:56	1
Chloroform	ND	1.0	0.60	ug/L			09/22/22 16:56	1
Chloroethane	ND	1.0	0.90	ug/L			09/22/22 16:56	1
Methylene Chloride	ND	1.0	0.89	ug/L			09/22/22 16:56	1
Tetrachloroethene	ND	1.0	0.47	ug/L			09/22/22 16:56	1
Trichloroethene	ND	1.0	0.69	ug/L			09/22/22 16:56	1
Vinyl chloride	ND	1.0	0.41	ug/L			09/22/22 16:56	1
Carbon disulfide	ND	1.0	0.88	ug/L			09/22/22 16:56	1
cis-1,2-Dichloroethene	ND	1.0	0.71	ug/L			09/22/22 16:56	1

Client: ARCADIS U.S., Inc. Project/Site: Cytec Havre de Grace MD

Client Sample ID: MW12S(091422)

Date Collected: 09/14/22 11:15 Date Received: 09/17/22 08:55 Lab Sample ID: 180-144683-17

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		26 - 156	09/22/22 16:56	1
4-Bromofluorobenzene (Surr)	84		36 - 124	09/22/22 16:56	1
Dibromofluoromethane (Surr)	85		46 - 149	09/22/22 16:56	1
Toluene-d8 (Surr)	101		40 - 146	09/22/22 16:56	1

Lab Sample ID: 180-144683-18 Client Sample ID: MW28D(091422)

Date Collected: 09/14/22 11:05 Date Received: 09/17/22 08:55 **Matrix: Water**

Method: SW846 EPA 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result Qu	ualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND ND	50	23	ug/L			09/22/22 17:18	50
1,2-Dichloroethane	1600	50	29	ug/L			09/22/22 17:18	50
Chloroform	ND	50	30	ug/L			09/22/22 17:18	50
Chloroethane	ND	50	45	ug/L			09/22/22 17:18	50
Methylene Chloride	ND	50	44	ug/L			09/22/22 17:18	50
Tetrachloroethene	ND	50	23	ug/L			09/22/22 17:18	50
Trichloroethene	ND	50	34	ug/L			09/22/22 17:18	50
Vinyl chloride	ND	50	20	ug/L			09/22/22 17:18	50
Carbon disulfide	ND	50	44	ug/L			09/22/22 17:18	50
cis-1,2-Dichloroethene	ND	50	35	ug/L			09/22/22 17:18	50

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88	26 - 156		09/22/22 17:18	50
4-Bromofluorobenzene (Surr)	83	36 - 124		09/22/22 17:18	50
Dibromofluoromethane (Surr)	84	46 - 149		09/22/22 17:18	50
Toluene-d8 (Surr)	103	40 - 146		09/22/22 17:18	50

Client Sample ID: MW25I(091422)

Date Collected: 09/14/22 11:40

Date Received: 09/17/22 08:55

Lab Sample ID: 180-144683-19

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	0.61	J	1.0	0.45	ug/L			09/22/22 17:39	1
1,2-Dichloroethane	2.0		1.0	0.57	ug/L			09/22/22 17:39	1
Chloroform	0.76	J	1.0	0.60	ug/L			09/22/22 17:39	1
Chloroethane	ND		1.0	0.90	ug/L			09/22/22 17:39	1
Methylene Chloride	ND		1.0	0.89	ug/L			09/22/22 17:39	1
Tetrachloroethene	0.67	J	1.0	0.47	ug/L			09/22/22 17:39	1
Trichloroethene	6.1		1.0	0.69	ug/L			09/22/22 17:39	1
Vinyl chloride	ND		1.0	0.41	ug/L			09/22/22 17:39	1
Carbon disulfide	ND		1.0	0.88	ug/L			09/22/22 17:39	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			09/22/22 17:39	1

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91	26 - 156		09/22/22 17:39	1
4-Bromofluorobenzene (Surr)	87	36 - 124		09/22/22 17:39	1
Dibromofluoromethane (Surr)	85	46 - 149		09/22/22 17:39	1
Toluene-d8 (Surr)	102	40 - 146		09/22/22 17:39	1

Client: ARCADIS U.S., Inc. Project/Site: Cytec Havre de Grace MD

Project/Site. Cytec Havie de Grace MD

Client Sample ID: MW-4(091422)

Date Collected: 09/14/22 11:50 Date Received: 09/17/22 08:55 Lab Sample ID: 180-144683-20

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			09/22/22 18:01	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			09/22/22 18:01	1
Chloroform	ND		1.0	0.60	ug/L			09/22/22 18:01	1
Chloroethane	ND		1.0	0.90	ug/L			09/22/22 18:01	1
Methylene Chloride	ND		1.0	0.89	ug/L			09/22/22 18:01	1
Tetrachloroethene	ND		1.0	0.47	ug/L			09/22/22 18:01	1
Trichloroethene	ND		1.0	0.69	ug/L			09/22/22 18:01	1
Vinyl chloride	ND		1.0	0.41	ug/L			09/22/22 18:01	1
Carbon disulfide	ND		1.0	0.88	ug/L			09/22/22 18:01	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			09/22/22 18:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qu	ualifier Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96	26 - 156		09/22/22 18:01	1
4-Bromofluorobenzene (Surr)	89	36 - 124		09/22/22 18:01	1
Dibromofluoromethane (Surr)	89	46 - 149		09/22/22 18:01	1
Toluene-d8 (Surr)	95	40 - 146		09/22/22 18:01	1

Client Sample ID: MW-6I(091422)

Date Collected: 09/14/22 12:00 Date Received: 09/17/22 08:55 Lab Sample ID: 180-144683-21

Matrix: Water

Method: SW846 EPA 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		5.0	2.3	ug/L			09/22/22 15:30	5
Chloroform	ND		5.0	3.0	ug/L			09/22/22 15:30	5
Chloroethane	ND		5.0	4.5	ug/L			09/22/22 15:30	5
Methylene Chloride	ND		5.0	4.4	ug/L			09/22/22 15:30	5
Tetrachloroethene	ND		5.0	2.3	ug/L			09/22/22 15:30	5
Trichloroethene	9.7		5.0	3.4	ug/L			09/22/22 15:30	5
Vinyl chloride	ND		5.0	2.0	ug/L			09/22/22 15:30	5
Carbon disulfide	ND		5.0	4.4	ug/L			09/22/22 15:30	5
cis-1,2-Dichloroethene	3.7	J	5.0	3.5	ug/L			09/22/22 15:30	5
Survey mate	9/ Bassyami	Ovalifian	Limita				Dramarad	Amalumad	Dil 500

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	
1,2-Dichloroethane-d4 (Surr)	99		26 - 156		09/22/22 15:30	5	
4-Bromofluorobenzene (Surr)	87		36 - 124		09/22/22 15:30	5	
Dibromofluoromethane (Surr)	93		46 - 149		09/22/22 15:30	5	
Toluene-d8 (Surr)	94		40 - 146		09/22/22 15:30	5	

MDL Unit

Prepared

Method: SW846 EPA 8260C - Volatile Organic Compounds (GC/MS) - DL

Result Qualifier

1,2-Dichloroethane	510	50	29 ug/L		09/22/22 20:31	50
Surrogate	%Recovery Qualifier	Limits		Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94	26 - 156			09/22/22 20:31	50
4-Bromofluorobenzene (Surr)	91	36 - 124			09/22/22 20:31	50
Dibromofluoromethane (Surr)	89	46 - 149			09/22/22 20:31	50
Toluene-d8 (Surr)	107	40 - 146			09/22/22 20:31	50

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Analyzed

Dil Fac

Client: ARCADIS U.S., Inc. Project/Site: Cytec Havre de Grace MD

Client Sample ID: MW8S(091422)

Lab Sample ID: 180-144683-22

Matrix: Water

Date Collected: 09/14/22 10:30 Date Received: 09/17/22 08:55

Method: SW846 EPA 82600	: - Volatile Orga	anic Comp	oounds (GC/I	VIS)					
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			09/22/22 18:22	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			09/22/22 18:22	1
Chloroform	ND		1.0	0.60	ug/L			09/22/22 18:22	1
Chloroethane	ND		1.0	0.90	ug/L			09/22/22 18:22	1
Methylene Chloride	ND		1.0	0.89	ug/L			09/22/22 18:22	1
Tetrachloroethene	ND		1.0	0.47	ug/L			09/22/22 18:22	1
Trichloroethene	ND		1.0	0.69	ug/L			09/22/22 18:22	1
Vinyl chloride	ND		1.0	0.41	ug/L			09/22/22 18:22	1
Carbon disulfide	ND		1.0	0.88	ug/L			09/22/22 18:22	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			09/22/22 18:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		26 - 156					09/22/22 18:22	1
4-Bromofluorobenzene (Surr)	89		36 - 124					09/22/22 18:22	1
Dibromofluoromethane (Surr)	92		46 - 149					09/22/22 18:22	1

Client Sample ID: MW8D(091422) Lab Sample ID: 180-144683-23

40 - 146

Date Collected: 09/14/22 10:40

Toluene-d8 (Surr)

Date Received: 09/17/22 08:55

09/22/22 18:22

Matrix: Water

Method: SW846 EPA 82600					_			
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND	1.0	0.45	ug/L			09/22/22 18:43	1
1,2-Dichloroethane	ND	1.0	0.57	ug/L			09/22/22 18:43	1
Chloroform	ND	1.0	0.60	ug/L			09/22/22 18:43	1
Chloroethane	ND	1.0	0.90	ug/L			09/22/22 18:43	1
Methylene Chloride	ND	1.0	0.89	ug/L			09/22/22 18:43	1
Tetrachloroethene	ND	1.0	0.47	ug/L			09/22/22 18:43	1
Trichloroethene	ND	1.0	0.69	ug/L			09/22/22 18:43	1
Vinyl chloride	ND	1.0	0.41	ug/L			09/22/22 18:43	1
Carbon disulfide	ND	1.0	0.88	ug/L			09/22/22 18:43	1
cis-1,2-Dichloroethene	ND	1.0	0.71	ug/L			09/22/22 18:43	1

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		26 - 156	-		09/22/22 18:43	1
4-Bromofluorobenzene (Surr)	91		36 - 124			09/22/22 18:43	1
Dibromofluoromethane (Surr)	89		46 - 149			09/22/22 18:43	1
Toluene-d8 (Surr)	103		40 - 146			09/22/22 18:43	1

Client Sample ID: TRIP BLANK

Date Collected: 09/14/22 00:00

Date Received: 09/17/22 08:55

Lab Sample ID: 180-144683-24

Matrix: Water

Method: SW846 EPA 8260C - Volatile Organic Compounds (GC/MS)

97

WELLIOU. 344040 EFA 02000 - VOIA	lie Org	anic Compoun	ius (GC/i	vi <i>3)</i>					
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			09/22/22 19:05	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			09/22/22 19:05	1
Chloroform	ND		1.0	0.60	ug/L			09/22/22 19:05	1
Chloroethane	ND		1.0	0.90	ug/L			09/22/22 19:05	1
Methylene Chloride	ND		1.0	0.89	ug/L			09/22/22 19:05	1

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Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 180-144683-1

Project/Site: Cytec Havre de Grace MD

Client Sample ID: TRIP BLANK

Lab Sample ID: 180-144683-24 Date Collected: 09/14/22 00:00 **Matrix: Water**

Date Received: 09/17/22 08:55

Method: SW846 EPA 82600	C - Volatile Organic Compounds	(GC/MS)	(Continued)
Δnalvte	Result Qualifier	RI	MDI Unit

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.0	0.47	ug/L			09/22/22 19:05	1
Trichloroethene	ND		1.0	0.69	ug/L			09/22/22 19:05	1
Vinyl chloride	ND		1.0	0.41	ug/L			09/22/22 19:05	1
Carbon disulfide	ND		1.0	0.88	ug/L			09/22/22 19:05	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			09/22/22 19:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		26 - 156			-		09/22/22 19:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepai	red Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		26 - 156		09/22/22 19:05	1
4-Bromofluorobenzene (Surr)	84		36 - 124		09/22/22 19:05	1
Dibromofluoromethane (Surr)	85		46 - 149		09/22/22 19:05	1
Toluene-d8 (Surr)	100		40 - 146		09/22/22 19:05	1

Client Sample ID: TRIP BLANK

Date Collected: 09/14/22 00:00

Date Received: 09/17/22 08:55

Lab Sample ID: 180-144683-25

Matrix: Water

Analyte	C - Volatile Organic Compor Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND ND	1.0	0.45	ug/L			09/22/22 19:26	1
1,2-Dichloroethane	ND	1.0	0.57	ug/L			09/22/22 19:26	1
Chloroform	ND	1.0	0.60	ug/L			09/22/22 19:26	1
Chloroethane	ND	1.0	0.90	ug/L			09/22/22 19:26	1
Methylene Chloride	ND	1.0	0.89	ug/L			09/22/22 19:26	1
Tetrachloroethene	ND	1.0	0.47	ug/L			09/22/22 19:26	1
Trichloroethene	ND	1.0	0.69	ug/L			09/22/22 19:26	1
Vinyl chloride	ND	1.0	0.41	ug/L			09/22/22 19:26	1
Carbon disulfide	ND	1.0	0.88	ug/L			09/22/22 19:26	1
cis-1,2-Dichloroethene	ND	1.0	0.71	ug/L			09/22/22 19:26	1

Surrogate	%Recovery Qualif	ier Limits	Prepared Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84	26 - 156	09/22/22 19:26	1
4-Bromofluorobenzene (Surr)	78	36 - 124	09/22/22 19:26	1
Dibromofluoromethane (Surr)	82	46 - 149	09/22/22 19:26	1
Toluene-d8 (Surr)	109	40 - 146	09/22/22 19:26	1

Client: ARCADIS U.S., Inc. Job ID: 180-144683-1

Project/Site: Cytec Havre de Grace MD

Method: EPA 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 180-412837/5

Matrix: Water

Analysis Batch: 412837

Client Sample ID: Method Blank Prep Type: Total/NA

MB MB Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Analyte D 1,1,2-Trichloroethane ND 1.0 0.45 ug/L 09/22/22 08:47 1,2-Dichloroethane ND 1.0 0.57 ug/L 09/22/22 08:47 ND Chloroform 1.0 0.60 ug/L 09/22/22 08:47 Chloroethane ND 1.0 0.90 ug/L 09/22/22 08:47 09/22/22 08:47 Methylene Chloride ND 1.0 0.89 ug/L Tetrachloroethene ND 1.0 0.47 ug/L 09/22/22 08:47 Trichloroethene ND 1.0 0.69 ug/L 09/22/22 08:47 Vinyl chloride ND 1.0 0.41 ug/L 09/22/22 08:47 Carbon disulfide ND 1.0 0.88 ug/L 09/22/22 08:47 cis-1,2-Dichloroethene ND 1.0 0.71 ug/L 09/22/22 08:47

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89	26 - 156		09/22/22 08:47	1
4-Bromofluorobenzene (Surr)	103	36 - 124		09/22/22 08:47	1
Dibromofluoromethane (Surr)	89	46 - 149		09/22/22 08:47	1
Toluene-d8 (Surr)	106	40 - 146		09/22/22 08:47	1

Lab Sample ID: LCS 180-412837/3

Matrix: Water

Analysis Batch: 412837

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1,2-Trichloroethane	10.0	11.7		ug/L		117	62 - 131	
1,2-Dichloroethane	10.0	10.4		ug/L		104	51 - 142	
Chloroform	10.0	10.3		ug/L		103	66 - 125	
Chloroethane	10.0	10.4		ug/L		104	10 - 170	
Methylene Chloride	10.0	10.5		ug/L		105	24 - 170	
Tetrachloroethene	10.0	11.9		ug/L		119	55 - 140	
Trichloroethene	10.0	9.92		ug/L		99	60 - 129	
Vinyl chloride	10.0	9.30		ug/L		93	33 - 154	
Carbon disulfide	10.0	11.5		ug/L		115	46 - 148	
cis-1,2-Dichloroethene	10.0	11.2		ug/L		112	60 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	92		26 - 156
4-Bromofluorobenzene (Surr)	122		36 - 124
Dibromofluoromethane (Surr)	95		46 - 149
Toluene-d8 (Surr)	118		40 - 146

Lab Sample ID: 180-144683-16 MS

Matrix: Water

Analysis Batch: 412837

Client Sample	ID: MW12D(091422)
	Prep Type: Total/NA

	Sample Sam	ple Spike	MS	MS				%Rec	
Analyte	Result Qual	ifier Added	Result	Qualifier	Unit	D	%Rec	Limits	
1,1,2-Trichloroethane	ND	10.0	11.4		ug/L		114	62 - 131	
1,2-Dichloroethane	ND	10.0	10.3		ug/L		103	51 - 142	
Chloroform	ND	10.0	9.71		ug/L		97	66 - 125	
Chloroethane	ND	10.0	9.29		ug/L		93	10 - 170	

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Client: ARCADIS U.S., Inc. Job ID: 180-144683-1

Project/Site: Cytec Havre de Grace MD

Method: EPA 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 180-144683-16 MS

Matrix: Water

Analysis Batch: 412837

Client Sample ID: MW12D(091422)

Prep Type: Total/NA

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Methylene Chloride	ND		10.0	8.83		ug/L		88	24 - 170	
Tetrachloroethene	ND		10.0	10.7		ug/L		107	55 - 140	
Trichloroethene	ND		10.0	9.27		ug/L		93	60 - 129	
Vinyl chloride	ND		10.0	8.84		ug/L		88	33 - 154	
Carbon disulfide	ND		10.0	11.0		ug/L		110	46 - 148	
cis-1,2-Dichloroethene	ND		10.0	10.2		ug/L		102	60 - 130	

MS MS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	86		26 - 156
4-Bromofluorobenzene (Surr)	114		36 - 124
Dibromofluoromethane (Surr)	90		46 - 149
Toluene-d8 (Surr)	101		40 - 146

Client Sample ID: MW12D(091422)

Prep Type: Total/NA

Matrix: Water

Analysis Batch: 412837

Lab Sample ID: 180-144683-16 MSD

/ illuly old Butolli + 12001											
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,1,2-Trichloroethane	ND		10.0	10.8		ug/L		108	62 - 131	6	26
1,2-Dichloroethane	ND		10.0	10.2		ug/L		102	51 - 142	1	27
Chloroform	ND		10.0	9.89		ug/L		99	66 - 125	2	25
Chloroethane	ND		10.0	9.46		ug/L		95	10 - 170	2	35
Methylene Chloride	ND		10.0	8.88		ug/L		89	24 - 170	1	35
Tetrachloroethene	ND		10.0	10.6		ug/L		106	55 - 140	1	27
Trichloroethene	ND		10.0	9.16		ug/L		92	60 - 129	1	25
Vinyl chloride	ND		10.0	8.58		ug/L		86	33 - 154	3	34
Carbon disulfide	ND		10.0	11.1		ug/L		111	46 - 148	1	30
cis-1,2-Dichloroethene	ND		10.0	10.0		ug/L		100	60 - 130	2	25

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	88		26 - 156
4-Bromofluorobenzene (Surr)	113		36 - 124
Dibromofluoromethane (Surr)	91		46 - 149
Toluene-d8 (Surr)	98		40 - 146

Lab Sample ID: MB 180-412846/13

Matrix: Water

Analysis Batch: 412846

Client Sample ID: Method Blank Prep Type: Total/NA

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			09/22/22 13:22	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			09/22/22 13:22	1
Chloroform	ND		1.0	0.60	ug/L			09/22/22 13:22	1
Chloroethane	ND		1.0	0.90	ug/L			09/22/22 13:22	1
Methylene Chloride	ND		1.0	0.89	ug/L			09/22/22 13:22	1
Tetrachloroethene	ND		1.0	0.47	ug/L			09/22/22 13:22	1
Trichloroethene	ND		1.0	0.69	ug/L			09/22/22 13:22	1
Vinyl chloride	ND		1.0	0.41	ug/L			09/22/22 13:22	1

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Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Job ID: 180-144683-1

Method: EPA 8260C - Volatile Organic Compounds (GC/MS) (Continued)

мв мв

Lab Sample ID: MB 180-412846/13

Matrix: Water

Analysis Batch: 412846

Client Sample ID: Method Blank

Prep Type: Total/NA

ı									
	Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Carbon disulfide	ND	1.0	0.88	ug/L			09/22/22 13:22	1
	cis-1,2-Dichloroethene	ND	1.0	0.71	ug/L			09/22/22 13:22	1

MB MB Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1,2-Dichloroethane-d4 (Surr) 94 26 - 156 09/22/22 13:22 4-Bromofluorobenzene (Surr) 80 36 - 124 09/22/22 13:22 Dibromofluoromethane (Surr) 09/22/22 13:22 46 - 149 88 Toluene-d8 (Surr) 101 40 - 146 09/22/22 13:22

Lab Sample ID: LCS 180-412846/8

Matrix: Water

Analysis Batch: 412846

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Spike LCS LCS %Rec Added Result Qualifier Limits Analyte Unit D %Rec 1,1,2-Trichloroethane 10.0 9.01 ug/L 90 62 - 131 51 - 142 1,2-Dichloroethane 10.0 9.55 ug/L 95 Chloroform 10.0 8.11 81 66 - 125 ug/L Chloroethane 10.0 117 11.7 ug/L 10 - 170 Methylene Chloride 10.0 8.77 ug/L 88 24 - 170 Tetrachloroethene 10.0 10.2 ug/L 102 55 - 140 Trichloroethene 10.0 9.19 92 60 - 129 ug/L Vinyl chloride 10.0 10.7 107 33 - 154 ug/L Carbon disulfide 10.0 9.60 ug/L 96 46 - 148 cis-1,2-Dichloroethene 10.0 9.42 94 60 - 130 ug/L

LCS LCS

Surrogate	%Recovery Q	ualifier Limits
1,2-Dichloroethane-d4 (Surr)	97	26 - 156
4-Bromofluorobenzene (Surr)	92	36 - 124
Dibromofluoromethane (Surr)	95	46 - 149
Toluene-d8 (Surr)	96	40 - 146

Lab Sample ID: MB 180-412972/6

Matrix: Water

Analysis Batch: 412972

Client Sample ID: Method Blank

Prep Type: Total/NA

	MB MB	}						
Analyte	Result Qu	alifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND ND	1.0	0.45	ug/L			09/23/22 09:26	1
1,2-Dichloroethane	ND	1.0	0.57	ug/L			09/23/22 09:26	1
Chloroform	ND	1.0	0.60	ug/L			09/23/22 09:26	1
Chloroethane	ND	1.0	0.90	ug/L			09/23/22 09:26	1
Methylene Chloride	ND	1.0	0.89	ug/L			09/23/22 09:26	1
Tetrachloroethene	ND	1.0	0.47	ug/L			09/23/22 09:26	1
Trichloroethene	ND	1.0	0.69	ug/L			09/23/22 09:26	1
Vinyl chloride	ND	1.0	0.41	ug/L			09/23/22 09:26	1
Carbon disulfide	ND	1.0	0.88	ug/L			09/23/22 09:26	1
cis-1,2-Dichloroethene	ND	1.0	0.71	ug/L			09/23/22 09:26	1

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Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Method: EPA 8260C - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 180-412972/6

Matrix: Water

Analysis Batch: 412972

Client Sample ID: Method Blank

Prep Type: Total/NA

Job ID: 180-144683-1

MR MR

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		26 - 156		09/23/22 09:26	1
4-Bromofluorobenzene (Surr)	89		36 - 124		09/23/22 09:26	1
Dibromofluoromethane (Surr)	98		46 - 149		09/23/22 09:26	1
Toluene-d8 (Surr)	99		40 - 146		09/23/22 09:26	1
	1,2-Dichloroethane-d4 (Surr) 4-Bromofluorobenzene (Surr) Dibromofluoromethane (Surr)	Surrogate%Recovery1,2-Dichloroethane-d4 (Surr)1004-Bromofluorobenzene (Surr)89Dibromofluoromethane (Surr)98	1,2-Dichloroethane-d4 (Surr) 100 4-Bromofluorobenzene (Surr) 89 Dibromofluoromethane (Surr) 98	Surrogate %Recovery Qualifier Limits 1,2-Dichloroethane-d4 (Surr) 100 26 - 156 4-Bromofluorobenzene (Surr) 89 36 - 124 Dibromofluoromethane (Surr) 98 46 - 149	Surrogate %Recovery Qualifier Limits Prepared 1,2-Dichloroethane-d4 (Surr) 100 26 - 156 4-Bromofluorobenzene (Surr) 89 36 - 124 Dibromofluoromethane (Surr) 98 46 - 149	Surrogate %Recovery Qualifier Limits Prepared Analyzed 1,2-Dichloroethane-d4 (Surr) 100 26 - 156 09/23/22 09:26 4-Bromofluorobenzene (Surr) 89 36 - 124 09/23/22 09:26 Dibromofluoromethane (Surr) 98 46 - 149 09/23/22 09:26

Lab Sample ID: LCS 180-412972/3

Matrix: Water

Analysis Batch: 412972

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit %Rec Limits 1.1.2-Trichloroethane 10.0 9.02 90 62 - 131 ug/L 1,2-Dichloroethane 10.0 9.10 ug/L 91 51 - 142 Chloroform 10.0 8.54 ug/L 85 66 - 125 Chloroethane 10.0 12.5 125 ug/L 10 - 170 Methylene Chloride 10.0 9.06 91 ug/L 24 - 170 Tetrachloroethene 10.0 11.5 ug/L 115 55 - 140 Trichloroethene 10.0 10.3 103 60 - 129 ug/L Vinyl chloride 10.0 11.6 ug/L 116 33 - 154Carbon disulfide 10.0 10.8 ug/L 108 46 - 148

9.84

ug/L

10.0

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		26 - 156
4-Bromofluorobenzene (Surr)	86		36 - 124
Dibromofluoromethane (Surr)	93		46 - 149
Toluene-d8 (Surr)	100		40 - 146

Lab Sample ID: 180-144683-6 MS

Matrix: Water

cis-1,2-Dichloroethene

Analysis Batch: 412972

Client Sample ID: MW23 (091522)_40 Prep Type: Total/NA

60 - 130

98

•	Sample Sample	Spike	MS	MS				%Rec
Analyte	Result Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
1,1,2-Trichloroethane	ND	10.0	9.85		ug/L		99	62 - 131
1,2-Dichloroethane	11	10.0	20.9		ug/L		100	51 - 142
Chloroform	ND	10.0	8.63		ug/L		86	66 - 125
Chloroethane	2.0	10.0	14.3		ug/L		123	10 - 170
Methylene Chloride	ND	10.0	8.22		ug/L		82	24 - 170
Tetrachloroethene	ND	10.0	11.2		ug/L		112	55 - 140
Trichloroethene	ND	10.0	10.5		ug/L		105	60 - 129
Vinyl chloride	ND	10.0	10.7		ug/L		107	33 - 154
Carbon disulfide	ND	10.0	9.90		ug/L		99	46 - 148
cis-1,2-Dichloroethene	0.86 J	10.0	10.9		ug/L		101	60 - 130

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Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	100		26 - 156
4-Bromofluorobenzene (Surr)	95		36 - 124
Dibromofluoromethane (Surr)	98		46 - 149
Toluene-d8 (Surr)	108		40 - 146

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Client: ARCADIS U.S., Inc.

Job ID: 180-144683-1

Project/Site: Cytec Havre de Grace MD

Method: EPA 8260C - Volatile Organic Compounds (GC/MS)

Lab Sample ID: 180-144683-6 MSD

Matrix: Water

Analysis Batch: 412972

Analysis Datch. 412972	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,1,2-Trichloroethane	ND		10.0	10.0		ug/L		100	62 - 131	1	26
1,2-Dichloroethane	11		10.0	21.0		ug/L		102	51 - 142	1	27
Chloroform	ND		10.0	8.19		ug/L		82	66 - 125	5	25
Chloroethane	2.0		10.0	15.2		ug/L		132	10 - 170	6	35
Methylene Chloride	ND		10.0	8.59		ug/L		86	24 - 170	4	35
Tetrachloroethene	ND		10.0	9.64		ug/L		96	55 - 140	15	27
Trichloroethene	ND		10.0	9.51		ug/L		95	60 - 129	10	25
Vinyl chloride	ND		10.0	9.89		ug/L		99	33 - 154	8	34
Carbon disulfide	ND		10.0	9.29		ug/L		93	46 - 148	6	30
cis-1,2-Dichloroethene	0.86	J	10.0	10.6		ug/L		97	60 - 130	3	25

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	97		26 - 156
4-Bromofluorobenzene (Surr)	90		36 - 124
Dibromofluoromethane (Surr)	95		46 - 149
Toluene-d8 (Surr)	97		40 - 146

Method: EPA 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 180-412610/6

Matrix: Water

Analysis Batch: 412610

MB MB

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND	1.0	0.76 mg/L			09/20/22 11:50	1

Lab Sample ID: LCS 180-412610/7

Matrix: Water

Analysis Batch: 412610

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Sulfate	50.0	47.7		mg/L		95	80 - 120	

Lab Sample ID: 180-144683-2 MS

Matrix: Water

Analysis Batch: 412610

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Sulfate	14	F1	50.0	40.6	F1	ma/l		52	80 120	

Lab Sample ID: 180-144683-2 MSD

Matrix: Water

Analysis Batch: 412610

Alialysis Dalcii. 412010												
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Sulfate	14	F1	50.0	38.1	F1	mg/L		47	80 - 120	6	15	

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Client Sample ID: MW23 (091522)_40

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: MW18 (091522)_24

Client Sample ID: MW18 (091522)_24

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

10

Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Job ID: 180-144683-1

Prep Type: Total/NA

Prep Batch: 413183

Prep Batch: 413183

Prep Batch: 413336

Client Sample ID: Lab Control Sample

Prep Type: Total Recoverable

Client Sample ID: Method Blank

Client Sample ID: Method Blank

Prep Type: Total Recoverable

Prep Type: Total Recoverable

Method: EPA 9056A - Anions, Ion Chromatography (Continued)

Client Sample ID: DUP02 (091522) Lab Sample ID: 180-144683-12 MS

Matrix: Water

Analysis Batch: 412610

Sample Sample Spike MS MS %Rec Result Qualifier Result Qualifier Added Limits Analyte Unit D %Rec 50.0 Sulfate 2.1 50.5 mg/L 97 80 - 120

Lab Sample ID: 180-144683-12 MSD Client Sample ID: DUP02 (091522) Prep Type: Total/NA

Matrix: Water

Analysis Batch: 412610

•	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Sulfate	2.1		50.0	51.5		mg/L		99	80 - 120	2	15

Method: EPA 6020A - Metals (ICP/MS)

Lab Sample ID: MB 180-413183/1-A Client Sample ID: Method Blank **Matrix: Water Prep Type: Total Recoverable**

Analysis Batch: 414147

MB MB Result Qualifier RL **MDL** Unit Dil Fac Analyte Prepared Analyzed 09/26/22 11:10 10/04/22 15:02 Iron ND 50 28 ug/L

Lab Sample ID: LCS 180-413183/2-A

Matrix: Water

Analysis Batch: 414147

LCS LCS Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits Iron 5000 5050 101 80 - 120 ug/L

Lab Sample ID: MB 180-413336/1-A

Matrix: Water

Analysis Batch: 414243

MB MB

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Iron ND 50 28 ug/L 09/27/22 13:15 10/05/22 18:22

Lab Sample ID: LCS 180-413336/2-A

Client Sample ID: Lab Control Sample Matrix: Water Prep Type: Total Recoverable Analysis Batch: 414243 Prep Batch: 413336 LCS LCS Spike %Rec Added Result Qualifier Analyte Unit %Rec Limits Iron 5000 5020 100 80 - 120 ug/L

Lab Sample ID: MB 180-413618/1-A

Matrix: Water

Analysis Batch: 414119

MB MB

Analyte Result Qualifier RL MDL Unit **Prepared** Analyzed Dil Fac 50 09/29/22 12:30 10/04/22 13:54 Iron ND 28 ug/L

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Prep Batch: 413618

Job ID: 180-144683-1

Prep Batch: 414345

10

Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Method: EPA 6020A - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 180-413618/2-A Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total Recoverable Analysis Batch: 414119 Prep Batch: 413618

Spike LCS LCS %Rec Added Result Qualifier Unit Limits Analyte %Rec Iron 5000 5170 ug/L 103 80 - 120

Lab Sample ID: MB 180-414345/1-A Client Sample ID: Method Blank **Matrix: Water Prep Type: Total Recoverable**

Prep Batch: 414345

MB MB

MDL Unit Result Qualifier RL Prepared Analyzed Dil Fac Analyte 50 10/06/22 16:00 10/14/22 12:07 Iron ND 28 ug/L

Lab Sample ID: LCS 180-414345/2-A **Client Sample ID: Lab Control Sample Matrix: Water Prep Type: Total Recoverable**

Analysis Batch: 415186

Spike LCS LCS %Rec

Added Result Qualifier Limits Analyte Unit %Rec Iron 5000 5200 104 80 - 120 ug/L

Method: EPA 9060A - Organic Carbon, Total (TOC)

Lab Sample ID: MB 180-414563/31 Client Sample ID: Method Blank Prep Type: Total/NA

Matrix: Water

Analysis Batch: 414563

Analysis Batch: 415186

MB MB

Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac Total Organic Carbon - Quad $\overline{\mathsf{ND}}$ 1.0 0.51 mg/L 10/08/22 08:28

Lab Sample ID: MB 180-414563/5 **Client Sample ID: Method Blank Matrix: Water** Prep Type: Total/NA

Analysis Batch: 414563

MB MB

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Total Organic Carbon - Quad ND 1.0 0.51 mg/L 10/07/22 19:26

Lab Sample ID: LCS 180-414563/30 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Water

Analysis Batch: 414563

LCS LCS Spike %Rec Added Result Qualifier Unit %Rec Limits Total Organic Carbon - Quad 20.0 21.3 106 85 - 115 mg/L

Lab Sample ID: 180-144683-3 MS Client Sample ID: MW18 (091522) 31 **Prep Type: Total/NA**

Matrix: Water

Analysis Batch: 414563

Sample Sample Spike MS MS %Rec Result Qualifier Added Result Qualifier Unit %Rec Limits 4.3 10.0 Total Organic Carbon - Quad 14 1 mg/L 98 85 - 115

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10/17/2022

QC Sample Results

Client: ARCADIS U.S., Inc. Job ID: 180-144683-1

Project/Site: Cytec Havre de Grace MD

Lab Sample ID: 180-144683-11 MS

Method: EPA 9060A - Organic Carbon, Total (TOC) (Continued)

Client Sample ID: MW16 (091522)

%Rec

Prep Type: Total/NA

Analysis Batch: 414563 Sample Sample Spike MS MS

Result Qualifier Analyte Result Qualifier Added Unit D %Rec Limits Total Organic Carbon - Quad 10.0 1.3 11.0 mg/L 97 85 - 115

Lab Sample ID: 180-144683-4 DU Client Sample ID: MW27 (091522) **Matrix: Water** Prep Type: Total/NA

Analysis Batch: 414563

Sample Sample DU DU **RPD** Result Qualifier Result Qualifier Unit RPD Limit Total Organic Carbon - Quad 0.68 J 0.677 J 0.3 mg/L

Client Sample ID: DUP02 (091522) Lab Sample ID: 180-144683-12 DU Prep Type: Total/NA

Matrix: Water

Matrix: Water

Analysis Batch: 414563

Sample Sample DU DU RPD Analyte Result Qualifier Result Qualifier RPD Limit Unit Total Organic Carbon - Quad 0.91 J 0.891 J 15 mg/L

Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

GC/MS VOA

Analysis Batch: 412837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-144683-1	DUP01 (091422)	Total/NA	Water	EPA 8260C	
180-144683-2	MW18 (091522)_24	Total/NA	Water	EPA 8260C	
180-144683-3	MW18 (091522)_31	Total/NA	Water	EPA 8260C	
180-144683-4	MW27 (091522)	Total/NA	Water	EPA 8260C	
180-144683-5	MW14I (091522)	Total/NA	Water	EPA 8260C	
180-144683-16	MW12D(091422)	Total/NA	Water	EPA 8260C	
MB 180-412837/5	Method Blank	Total/NA	Water	EPA 8260C	
LCS 180-412837/3	Lab Control Sample	Total/NA	Water	EPA 8260C	
180-144683-16 MS	MW12D(091422)	Total/NA	Water	EPA 8260C	
180-144683-16 MSD	MW12D(091422)	Total/NA	Water	EPA 8260C	

Analysis Batch: 412846

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-144683-12	DUP02 (091522)	Total/NA	Water	EPA 8260C	- <u> </u>
180-144683-13	MW14(091422)	Total/NA	Water	EPA 8260C	
180-144683-15	MW13D(091422)	Total/NA	Water	EPA 8260C	
180-144683-17	MW12S(091422)	Total/NA	Water	EPA 8260C	
180-144683-18	MW28D(091422)	Total/NA	Water	EPA 8260C	
180-144683-19	MW25I(091422)	Total/NA	Water	EPA 8260C	
180-144683-20	MW-4(091422)	Total/NA	Water	EPA 8260C	
180-144683-21	MW-6I(091422)	Total/NA	Water	EPA 8260C	
180-144683-21 - DL	MW-6I(091422)	Total/NA	Water	EPA 8260C	
180-144683-22	MW8S(091422)	Total/NA	Water	EPA 8260C	
180-144683-23	MW8D(091422)	Total/NA	Water	EPA 8260C	
180-144683-24	TRIP BLANK	Total/NA	Water	EPA 8260C	
180-144683-25	TRIP BLANK	Total/NA	Water	EPA 8260C	
MB 180-412846/13	Method Blank	Total/NA	Water	EPA 8260C	
LCS 180-412846/8	Lab Control Sample	Total/NA	Water	EPA 8260C	

Analysis Batch: 412972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-144683-6	MW23 (091522)_40	Total/NA	Water	EPA 8260C	
180-144683-7	MW23 (091522)_47	Total/NA	Water	EPA 8260C	
180-144683-8	MW19DI (091522)	Total/NA	Water	EPA 8260C	
180-144683-8 - DL	MW19DI (091522)	Total/NA	Water	EPA 8260C	
180-144683-9	MW20DI (091522)	Total/NA	Water	EPA 8260C	
180-144683-10	MW3 (091522)	Total/NA	Water	EPA 8260C	
180-144683-11	MW16 (091522)	Total/NA	Water	EPA 8260C	
180-144683-14	MW22D(091422)	Total/NA	Water	EPA 8260C	
MB 180-412972/6	Method Blank	Total/NA	Water	EPA 8260C	
_CS 180-412972/3	Lab Control Sample	Total/NA	Water	EPA 8260C	
180-144683-6 MS	MW23 (091522)_40	Total/NA	Water	EPA 8260C	
180-144683-6 MSD	MW23 (091522) 40	Total/NA	Water	EPA 8260C	

HPLC/IC

Analysis Batch: 412610

Lab Sample ID 180-144683-2	Client Sample ID MW18 (091522)_24	Prep Type Total/NA	Matrix Water	Method EPA 9056A	Prep Batch
180-144683-3	MW18 (091522)_31	Total/NA	Water	EPA 9056A	
180-144683-4	MW27 (091522)	Total/NA	Water	EPA 9056A	

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Job ID: 180-144683-1

QC Association Summary

Client: ARCADIS U.S., Inc.

Job ID: 180-144683-1 Project/Site: Cytec Havre de Grace MD

HPLC/IC (Continued)

Analysis Batch: 412610 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-144683-5	MW14I (091522)	Total/NA	Water	EPA 9056A	
180-144683-6	MW23 (091522)_40	Total/NA	Water	EPA 9056A	
180-144683-7	MW23 (091522)_47	Total/NA	Water	EPA 9056A	
180-144683-8	MW19DI (091522)	Total/NA	Water	EPA 9056A	
180-144683-9	MW20DI (091522)	Total/NA	Water	EPA 9056A	
180-144683-10	MW3 (091522)	Total/NA	Water	EPA 9056A	
180-144683-11	MW16 (091522)	Total/NA	Water	EPA 9056A	
180-144683-12	DUP02 (091522)	Total/NA	Water	EPA 9056A	
MB 180-412610/6	Method Blank	Total/NA	Water	EPA 9056A	
LCS 180-412610/7	Lab Control Sample	Total/NA	Water	EPA 9056A	
180-144683-2 MS	MW18 (091522)_24	Total/NA	Water	EPA 9056A	
180-144683-2 MSD	MW18 (091522)_24	Total/NA	Water	EPA 9056A	
180-144683-12 MS	DUP02 (091522)	Total/NA	Water	EPA 9056A	
180-144683-12 MSD	DUP02 (091522)	Total/NA	Water	EPA 9056A	

Metals

Prep Batch: 413183

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-144683-2	MW18 (091522)_24	Total Recoverable	Water	3005A	
180-144683-3	MW18 (091522)_31	Total Recoverable	Water	3005A	
180-144683-4	MW27 (091522)	Total Recoverable	Water	3005A	
180-144683-5	MW14I (091522)	Total Recoverable	Water	3005A	
180-144683-6	MW23 (091522)_40	Total Recoverable	Water	3005A	
180-144683-7	MW23 (091522)_47	Total Recoverable	Water	3005A	
MB 180-413183/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-413183/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 413336

Lab Sample ID 180-144683-12	Client Sample ID DUP02 (091522)	Prep Type Total Recoverable	Matrix Water	Method 3005A	Prep Batch
MB 180-413336/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-413336/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Prep Batch: 413618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-144683-8	MW19DI (091522)	Total Recoverable	Water	3005A	
180-144683-9	MW20DI (091522)	Total Recoverable	Water	3005A	
180-144683-10	MW3 (091522)	Total Recoverable	Water	3005A	
180-144683-11	MW16 (091522)	Total Recoverable	Water	3005A	
MB 180-413618/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-413618/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Filtration Batch: 414063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-144683-2	MW18 (091522)_24	Dissolved	Water	Filtration	
180-144683-3	MW18 (091522)_31	Dissolved	Water	Filtration	
180-144683-4	MW27 (091522)	Dissolved	Water	Filtration	
180-144683-5	MW14I (091522)	Dissolved	Water	Filtration	
180-144683-6	MW23 (091522)_40	Dissolved	Water	Filtration	
180-144683-7	MW23 (091522)_47	Dissolved	Water	Filtration	

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QC Association Summary

Client: ARCADIS U.S., Inc. Job ID: 180-144683-1 Project/Site: Cytec Havre de Grace MD

Metals (Continued)

Filtration Batch: 414063 (Continued)

Lab Sample ID 180-144683-8	Client Sample ID MW19DI (091522)	Prep Type Dissolved	Matrix Water	Method Filtration	Prep Batch
180-144683-9	MW20DI (091522)	Dissolved	Water	Filtration	
180-144683-10	MW3 (091522)	Dissolved	Water	Filtration	
180-144683-11	MW16 (091522)	Dissolved	Water	Filtration	
180-144683-12	DUP02 (091522)	Dissolved	Water	Filtration	

Analysis Batch: 414119

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-144683-8	MW19DI (091522)	Total Recoverable	Water	EPA 6020A	413618
180-144683-9	MW20DI (091522)	Total Recoverable	Water	EPA 6020A	413618
180-144683-10	MW3 (091522)	Total Recoverable	Water	EPA 6020A	413618
180-144683-11	MW16 (091522)	Total Recoverable	Water	EPA 6020A	413618
MB 180-413618/1-A	Method Blank	Total Recoverable	Water	EPA 6020A	413618
LCS 180-413618/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020A	413618

Analysis Batch: 414147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-144683-2	MW18 (091522)_24	Total Recoverable	Water	EPA 6020A	413183
180-144683-3	MW18 (091522)_31	Total Recoverable	Water	EPA 6020A	413183
180-144683-4	MW27 (091522)	Total Recoverable	Water	EPA 6020A	413183
180-144683-5	MW14I (091522)	Total Recoverable	Water	EPA 6020A	413183
180-144683-6	MW23 (091522)_40	Total Recoverable	Water	EPA 6020A	413183
180-144683-7	MW23 (091522)_47	Total Recoverable	Water	EPA 6020A	413183
MB 180-413183/1-A	Method Blank	Total Recoverable	Water	EPA 6020A	413183
LCS 180-413183/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020A	413183

Analysis Batch: 414243

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-144683-12	DUP02 (091522)	Total Recoverable	Water	EPA 6020A	413336
MB 180-413336/1-A	Method Blank	Total Recoverable	Water	EPA 6020A	413336
LCS 180-413336/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020A	413336

Prep Batch: 414345

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-144683-2	MW18 (091522)_24	Dissolved	Water	3005A	414063
180-144683-3	MW18 (091522)_31	Dissolved	Water	3005A	414063
180-144683-4	MW27 (091522)	Dissolved	Water	3005A	414063
180-144683-5	MW14I (091522)	Dissolved	Water	3005A	414063
180-144683-6	MW23 (091522)_40	Dissolved	Water	3005A	414063
180-144683-7	MW23 (091522)_47	Dissolved	Water	3005A	414063
180-144683-8	MW19DI (091522)	Dissolved	Water	3005A	414063
180-144683-9	MW20DI (091522)	Dissolved	Water	3005A	414063
180-144683-10	MW3 (091522)	Dissolved	Water	3005A	414063
180-144683-11	MW16 (091522)	Dissolved	Water	3005A	414063
180-144683-12	DUP02 (091522)	Dissolved	Water	3005A	414063
MB 180-414345/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 180-414345/2-A	Lab Control Sample	Total Recoverable	Water	3005A	

Analysis Batch: 415186

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-144683-2	MW18 (091522)_24	Dissolved	Water	EPA 6020A	414345

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QC Association Summary

Client: ARCADIS U.S., Inc.

Job ID: 180-144683-1

Project/Site: Cytec Havre de Grace MD

Metals (Continued)

Analysis Batch: 415186 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-144683-3	MW18 (091522)_31	Dissolved	Water	EPA 6020A	414345
180-144683-4	MW27 (091522)	Dissolved	Water	EPA 6020A	414345
180-144683-5	MW14I (091522)	Dissolved	Water	EPA 6020A	414345
180-144683-6	MW23 (091522)_40	Dissolved	Water	EPA 6020A	414345
180-144683-7	MW23 (091522)_47	Dissolved	Water	EPA 6020A	414345
180-144683-8	MW19DI (091522)	Dissolved	Water	EPA 6020A	414345
180-144683-9	MW20DI (091522)	Dissolved	Water	EPA 6020A	414345
180-144683-10	MW3 (091522)	Dissolved	Water	EPA 6020A	414345
180-144683-11	MW16 (091522)	Dissolved	Water	EPA 6020A	414345
180-144683-12	DUP02 (091522)	Dissolved	Water	EPA 6020A	414345
MB 180-414345/1-A	Method Blank	Total Recoverable	Water	EPA 6020A	414345
LCS 180-414345/2-A	Lab Control Sample	Total Recoverable	Water	EPA 6020A	414345

General Chemistry

Analysis Batch: 414563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
180-144683-2	MW18 (091522)_24	Total/NA	Water	EPA 9060A	
180-144683-3	MW18 (091522)_31	Total/NA	Water	EPA 9060A	
180-144683-4	MW27 (091522)	Total/NA	Water	EPA 9060A	
180-144683-5	MW14I (091522)	Total/NA	Water	EPA 9060A	
180-144683-6	MW23 (091522)_40	Total/NA	Water	EPA 9060A	
180-144683-7	MW23 (091522)_47	Total/NA	Water	EPA 9060A	
180-144683-8	MW19DI (091522)	Total/NA	Water	EPA 9060A	
180-144683-9	MW20DI (091522)	Total/NA	Water	EPA 9060A	
180-144683-10	MW3 (091522)	Total/NA	Water	EPA 9060A	
180-144683-11	MW16 (091522)	Total/NA	Water	EPA 9060A	
180-144683-12	DUP02 (091522)	Total/NA	Water	EPA 9060A	
MB 180-414563/31	Method Blank	Total/NA	Water	EPA 9060A	
MB 180-414563/5	Method Blank	Total/NA	Water	EPA 9060A	
LCS 180-414563/30	Lab Control Sample	Total/NA	Water	EPA 9060A	
180-144683-3 MS	MW18 (091522)_31	Total/NA	Water	EPA 9060A	
180-144683-11 MS	MW16 (091522)	Total/NA	Water	EPA 9060A	
180-144683-4 DU	MW27 (091522)	Total/NA	Water	EPA 9060A	
180-144683-12 DU	DUP02 (091522)	Total/NA	Water	EPA 9060A	

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Eurofins Pittsburgh 301 Alpha Drive RIDC Park Pittsburgh, PA 15238 Phone: 412-963-7058 Fax: 412-963-2468	Chain of Cus	Chain of Custody Record		🔐 eurofins Envronment Testing America
Client Information	Sampler And I Feild	Lab PM: Colùssy, Jill L	Carrier Tracking No(s):	COC No. 180-83959-14117.1
Client Contact: Ms. Shwetha Sridharan	354		State of Grigin.	Page: Page 1 of 5
Company ARCADIS U.S., Inc.			equested	Job #+
Address; 7550 Teague Road Suite 210	Due Date Requested: Stander			on Cod
City. Hanover	TAT Requested (days):	1	1	B - NaOH O - AsNaO2 C - Zn Acetate P - Na204S
State, Zip. MD, 21076	Compliance Project: △ Yes △ No			D - Nitric Acid Q - Na2SO3 E - NaHSO4 R - Na2S2O3
Phone. 302-897-8993(Tel)	Po#- 30005455.0002.			g
Email: shwetha. sridharan@arcadis.com	WO#: 30114618		6	I - Ice J - DI Water
Project Name: . Cytec Havre de Grace MD	Project #: 18017987 ,	78	HER HER	K - EDTA Y - Trizma L - EDA Z - other (specify)
Siles Mary land	SSOW#:			Other:
	Sample Type Type	Matrix (Wewster, Copyright Seconds, Seconds)	admuN is	
Sample Identification		(E)		Special Instructions/Note:
My 14 (09,1422)		200		7
MW 22 D (09 1422)	9/14/12 1000 6	\$ 5 5		
(22 4190) (181 WM)	,	· w 443		
MW 121) (09/422)	9/14/12 1/125 6	10 21 g		MS/MSD
MW 125 (091422)	9/14/22 1115 6	2 2 2 3		
MW 280 (0914 22)	9/14/25/1105 6	2 7 7 23	90	
2418	9 0111 22/41/6	2 2 2 3		
1-4(0014	11/22 1150	2 62 3		
my - 67(091422)	_	5 77 3		
(D 4 14)	- 1	3 3 3		
MW8D(091422)	2 10/01 22/1/1	3		Si⊇
Possible Hazard Idehtification Possible Hazard Idehtification			Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) Return To Client Disposal By Lab Mon	ned longer than 1 month) hive For
V, Other (specify)			nents:	
Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:	
Relinquished by:	Date/Time.	Company Received by: OUS	Date/fing	1-23 CongagaAK
Relinquished by	Date/Time.	Company Received by:	Date/Time	Company
Relinquished by:	Date/Time.	Company Received by: 1	i Date/Time	Company
Custody Seals Intact: Custody Seal No.:		Çqqler Temperajure(s) °C and Other Remarks;	Remarks:	-
				Ver 06/08/2021

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 180-144683-1

Login Number: 144683 List Source: Eurofins Pittsburgh

List Number: 1

Creator: Abernathy, Eric L

Oreator. Abernatily, Life L		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Received Trip Blank(s) not listed on COC.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	False	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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Appendix E

Data Validation Report



Cytec Solvay Group

DATA REVIEW

Havre de Grace, Maryland

Volatile Organic Compound (VOC), Dissolved Gases, Metals and Miscellaneous

SDGs # 180-144683-1 and 222091648

Analyses Performed By: TestAmerica Laboratories, Inc. Pittsburgh, PA And Pace Analytical Gulf Coast

Report # 47333R Review Level: Tier II Project: 30114618.02

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group SDGs# 180-144683-1 and 222091648 for samples collected in association with the Havre de Grace site in Maryland. The review was conducted as a Tier II evaluation and included review of data package completeness as required under USEPA Region III M3 validation. Only analytical data as reported by the laboratory were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

40.0				Sample	Parent	Ana		alysis		
SDGs	Sample ID	Lab ID	Matrix	Collection Date	Sample	VOC	DG	MET	MISC	
	DUP01 (091422)	180-144683-1	Water	09/14/22	MW8S(091422)	Х				
	MW18 (091522)_24	180-144683-2	Water	09/15/22		Х		Х	Х	
	MW18 (091522)_31	180-144683-3	Water	09/15/22		Х		Х	Х	
	MW27 (091522)	180-144683-4	Water	09/15/22		Х		Х	Χ	
	MW14I (091522)	180-144683-5	Water	09/15/22		Х		Х	Χ	
	MW23 (091522)_40	180-144683-6	Water	09/15/22		Х		Х	Χ	
	MW23 (091522)_47	180-144683-7	Water	09/15/22		Х		Х	Χ	
	MW19DI (091522)	180-144683-8	Water	09/15/22		Х		Х	Х	
	MW20DI (091522)	180-144683-9	Water	09/15/22		Х		Х	Χ	
	MW3 (091522)	180-144683-10	Water	09/15/22		Х		Х	Χ	
	MW16 (091522)	180-144683-11	Water	09/15/22		Х		Х	Х	
	DUP02 (091522)	180-144683-12	Water	09/15/22	MW3 (091522)	Х		Х	Χ	
180-144683-1	MW14(091422)	180-144683-13	Water	09/14/22		Х				
	MW22D(091422)	180-144683-14	Water	09/14/22		Х				
	MW13D(091422)	180-144683-15	Water	09/14/22		Х				
	MW12D(091422)	180-144683-16	Water	09/14/22		Х				
	MW12S(091422)	180-144683-17	Water	09/14/22		Х				
	MW28D(091422)	180-144683-18	Water	09/14/22		Х				
	MW25I(091422)	180-144683-19	Water	09/14/22		Х				
	MW-4(091422)	180-144683-20	Water	09/14/22		Х				
	MW-6I(091422)	180-144683-21	Water	09/14/22		Х				
	MW8S(091422)	180-144683-22	Water	09/14/22		Х				
	MW8D(091422)	180-144683-23	Water	09/14/22		Х				
	TRIP BLANK	180-144683-24	Water	09/14/22		Х				
	TRIP BLANK	180-144683-25	Water	09/14/22		Х				
	MW18(091522)-24	22209164801	Water	9/15/22			Х			
	MW18(091522)-31	22209164802	Water	9/15/22			Х			
	MW27(091522)	22209164803	Water	9/15/22	MW3 (091421)		Х			
222004640	MW14I(091522)	22209164804	Water	9/15/22			Х			
222091648	MW23(091522)-40	22209164805	Water	9/15/22			Х			
	MW23(091522)-47	22209164806	Water	9/15/22			Х			
	MW19D1(091522)	22209164807	Water	9/15/22			Х			
	MW20D1(091522)	22209164808	Water	9/15/22			Х			

000				Sample	Parent	Analysis			
SDGs	Sample ID	Lab ID	Matrix	Collection Date	Sample	voc	DG	MET	MISC
	MW3(091522)	22209164809	Water	9/15/22			Х		
	MW16(091522)	22209164810	Water	9/15/22			Х		
	DUP02(091522)	22209164812	Water	9/15/22	MW3 (091522)		Х		
	FB(091522)	22209164811	Water	9/15/22			Х		

Note:

VOC – Volatile Organic Compound

DG - Dissolved gases

MET – Metal analysis includes total and dissolved iron

MISC – Miscellaneous analysis includes sulfate and total organic carbon.

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Rep	Reported		rmance ptable	Not
	No	Yes	No	Yes	Required
1. Sample receipt condition		Х		Х	
2. Requested analyses and sample results		Х		Х	
Master tracking list		X		Х	
4. Methods of analysis		Х		Х	
5. Reporting limits		Х		Х	
6. Sample collection date		Х		Х	
7. Laboratory sample received date		Х		Х	
8. Sample preservation verification (as applicable)		Х		Х	
Sample preparation/extraction/analysis dates		Х		Х	
10. Fully executed Chain-of-Custody (COC) form		Х		Х	
11. Narrative summary of QA or sample problems provided		Х		Х	
12. Data Package Completeness and Compliance		Х		Х	

Note:

QA - Quality Assurance

ORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Methods 8260C and AM20GAX. All samples in this data set were subjected to M3 (Tier III) level data validation for organic compounds, as defined in the USEPA Region III Innovative Approaches to Data Validation (June 1995). Validation was performed following the procedures specified in Region III Modifications to National Functional Guidelines for Organic Data Review (September 1994) and USEPA National Functional Guidelines NFG for Organic Superfund Methods Data Review, EPA-540-R-20-005 (November 2020), with reference to the historical USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review, OSWER 9240.1-05A-P, October 1999, as appropriate).

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers
 - U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
 - B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- Quantitation (Q) Qualifiers
 - E The compound was quantitated above the calibration range.
 - D Concentration is based on a diluted sample analysis.
- Validation Qualifiers
 - J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
 - UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
 - JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.
 - UB Compound considered non-detect at the listed value due to associated blank contamination.
 - N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
 - K The compound was positively identified; however, the associated numerical value is an estimated concentration only and the reported value may be biased high. Actual concentration is expected lower.

- L The compound was positively identified; however, the associated numerical value is an estimated concentration only and the reported value may be biased low. Actual concentration is expected lower.
- R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

VOLATILE ORGANIC COMPOUND (VOC) ANALYSIS

1. Holding Times

The specified holding times for the following methods are presented in the following table.

	Method	Matrix	Holding Time	Preservation
SI	N846 8260C	Water	14 days from collection to analysis	Cool to < 6°C; preserved to a pH of less than 2 s.u.

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

MS/MSD analysis was performed on sample MW23 (091522)_40 and MW12D(091422). The MS/MSD analysis exhibited acceptable recoveries and RPDs.

5. Laboratory Control Sample / Laboratory Control Sample Duplicate (LCS/LCSD) Analyses

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS/LCSD analysis must exhibit a percent recovery and RPD within the laboratory-established acceptance limits.

All compounds associated with the LCS/LCSD analysis exhibited recoveries and RPDs.

6. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compound	Sample Result (ug/L)	Duplicate Result (ug/L)	RPD
MW-8S (091422) / DUP-01 (091422)	All target compounds	U	U	AC
	1,2-Dichloroethane	34	38	AC
MW-3 (091522) / DUP-02 (091522)	Methylene Chloride	27	31	AC
	Vinyl chloride	91	100	9%

Notes:

U - Non detect

AC - Acceptable

The calculated RPDs and differences between the parent sample and field duplicate were acceptable.

7. System Performance and Overall Assessment

Sample results associated with compound that exhibited a concentration greater than the linear range of the instrument calibration are summarized in the following table.

Sample IDs	Compound	Original Analysis	Diluted Analysis	Reported Analysis
MW19DI (091522)	1,2-Dichloroethane		52	52 D
MW-6I(091422)	1,2-Dichloroethane		510	510 D

Note: In the instance where both the original analysis and the diluted analysis sample results exhibited a concentration greater than and/or less than the calibration linear range of the instrument; the sample result exhibiting the greatest concentration will be reported as the final result.

Sample results associated with compounds exhibiting concentrations greater than the linear range are qualified as documented in the table below when reported as the final reported sample result.

Reported Sample Results	Qualification
Diluted sample result within calibration range	D
Diluted sample result less than the calibration range	DJ
Diluted sample result greater than the calibration range	EDJ

Reported Sample Results	Qualification
Original sample result greater than the calibration range	EJ

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR VOCs

VOCs: SW846 8260C		Reported		rmance ptable	Not
	No	Yes	No	Yes	Required
GAS CHROMATOGRAPHY/MASS SPECTROMETRY	(GC/MS)				
Tier II Validation					
Holding times		Х		Х	
Reporting limits (units)		Х		Х	
Blanks					
A. Method blanks		Х		Х	
B. Equipment blanks	Х				Х
C. Trip blanks		Х		Х	
Laboratory Control Sample (LCS) %R		Х		Х	
Laboratory Control Sample Duplicate (LCSD) %R	Х				Х
LCS/LCSD Precision (RPD)	Х				Х
Matrix Spike (MS) %R		Х		Х	
Matrix Spike Duplicate (MSD) %R		Х		Х	
MS/MSD Precision (RPD)		Х		Х	
Lab Duplicate (RPD)	Х				Х
Field Duplicate (RPD)		Х		Х	
Surrogate Spike Recoveries		Х		Х	
Dilution Factor		Х		Х	

Notes:

%R Percent recovery

RPD Relative percent difference

DISSOLVED GASES ANALYSIS

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
AM20GAX	Water	14 days from collection to analysis	Cool to <6°C; preserved to a pH of greater than 10 s.u.

All samples were analyzed within the specified holding time criteria.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the detection limit (DL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the DL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

MS/MSD analysis was not performed on samples from this SDG.

4. Laboratory Control Sample / Laboratory Control Sample Duplicate (LCS/LCSD) Analyses

The LCS/LCSD analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS/LCSD analysis must exhibit a percent recovery and RPD within the laboratory-established acceptance limits.

All compounds associated with the LCS/LCSD analysis exhibited recoveries and RPDs within the control limits.

5. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent

sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

	Sample ID/Duplicate ID	Compound	Sample Result (ug/L)	Duplicate Result (ug/L)	RPD
MW-3 (091522) / DUP-02 (091522)	Ethane	0.93 J	1.0	AC	
	Ethene	10	11	10%	
		Methane	14	18	AC

Notes:

AC - Acceptable

The calculated RPDs and differences between the parent sample and field duplicate were acceptable.

6. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR DISSOLVED GASES

DISSOLVED GASES: AM20GAX	Rep	Reported		rmance ptable	Not
	No	Yes	No	Yes	Required
GAS CHROMATOGRAPHY/MASS SPECTROMETRY	(GC/MS)				
Tier II Validation					
Holding times		Х		Х	
Reporting limits (units)		Х		Х	
Blanks	'		'		
A. Method blanks		Х		Х	
B. Equipment blanks		Х		Х	
C. Trip blanks	Х				Х
Laboratory Control Sample (LCS) %R		Х		Х	
Laboratory Control Sample Duplicate (LCSD) %R		Х		Х	
LCS/LCSD Precision (RPD)		Х		Х	
Matrix Spike (MS) %R	Х				Х
Matrix Spike Duplicate (MSD) %R	Х				Х
MS/MSD Precision (RPD)	Х				Х
Lab Duplicate (RPD)	Х				Х
Field Duplicate (RPD)		Х		Х	
Dilution Factor		Х		Х	

Notes:

%R Percent recovery

RPD Relative percent difference

INORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Methods 6020A, 9056A and 9060A. Data were reviewed in accordance with USEPA National Functional Guidelines NFG for Inorganic Superfund Methods Data Review, EPA-540-R-20-006 (November 2020), with reference to the historical USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, OSWER 9240.1-05A-P, October 2004, as appropriate).

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and that it was already subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines:

Concentration (C) Qualifiers

- U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.
- J The reported value was obtained from a reading less than the reporting limit (RL), but greater than or equal to the method detection limit (MDL).

· Quantitation (Q) Qualifiers

- E The reported value is estimated due to the presence of interference.
- N Spiked sample recovery is not within control limits.
- Duplicate analysis is not within control limits.

Validation Qualifiers

- J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.
- UJ The analyte was not detected above the reporting limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.
- UB Analyte is considered non-detect at the listed value due to associated blank contamination.
- R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

METALS ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 6020B	Water	180 days from collection to analysis	Cool to < 6 C; pH <2 with HNO3

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Matrix Spike (MS)/ Matrix Spike Duplicate (MS/MSD) / Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

3.1 MS/MSD Analysis

All metal analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The relative percent difference (RPD) between the MS and MSD results must be no greater than the established acceptance limit of 20%. The MS/MSD control limits do not apply for MS/MSDs performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS/MSD spiking concentration by a factor of four or greater. In instance where this is true, the data will not be qualified and the laboratory qualifier will be removed. Sample results associated with MS/MSD exceedances where the parent samples are not site-specific are not qualified.

The MS/MSD analysis was not performed on sample from this SDG.

3.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for water matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

The laboratory duplicate was not performed on sample from this SDG.

4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent

sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result (ug/L)	Duplicate Result (ug/L)	RPD
MW 2 (001522) / DUD 02 (001522)	Iron, Total	1900	4800	87%
MW-3 (091522) / DUP-02 (091522)	Iron, Dissolved	U	U	AC

Notes:

U - Non detect

AC - Acceptable

The analyte Iron, Total associated with samples MW-3 (091522) / DUP-02 (091522) exhibited a field duplicate RPD greater than the control limit. The associated sample results were qualified as estimated.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

All LCS recoveries were within control limits.

6. Serial Dilution

The serial dilution analysis is used to assess if a significant physical or chemical interference exists due to sample matrix. Analytes exhibiting concentrations greater than 50 times the MDL in the undiluted sample are evaluated to determine if matrix interference exists. These analytes are required to have less than a 10% difference (%D) between sample results from the undiluted (parent) sample and results associated with the same sample analyzed with a five-fold dilution.

The serial dilution analysis was not performed on a samples from this SDG.

7. General Assessment - Total vs. Dissolved

When the dissolved concentration exceeded the associated total concentration, and both results were five times greater than the LOQ, then the %D between the total and dissolved concentrations must be less than 10%.

The calculated %D between the total and the dissolved sample results were within the control limit.

8. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR METAL

METALS; SW-846 6020B	Reported		Performance Acceptable		Not	
	No	Yes	No	Yes	Required	

Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP-AES)

Inductively Coupled Plasma-Mass Spectrometry (ICP-MS)

Atomic Absorption – Manual Cold Vapor (CV)

Tier II Validation					
Holding Times		Х		Х	
Reporting limits (units)		X		X	
Blanks					
A. Instrument Blanks		Х		х	
B. Method Blanks		Х		Х	
C. Equipment/Field Blanks		Х		х	
Laboratory Control Sample (LCS)		X		Х	
Laboratory Control Sample Duplicate (LCSD) %R	X				Х
LCS/LCSD Precision (RPD)	X				Х
Matrix Spike (MS) %R	X				Х
Matrix Spike Duplicate (MSD) %R	X				Х
MS/MSD Precision (RPD)	X				Х
Lab Duplicate (RPD)	X				Х
Field Duplicate (RPD)		Х	Х		
ICP Serial Dilution %D	X				Х
Total vs. Dissolved		Х		х	
Reporting Limit Verification		Х		Х	

Notes:

%R = Percent recovery

RPD = Relative percent difference

GENERAL CHEMISTRY ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
Sulfate by SM 9056A	Water	28 days from collection to analysis	Cool to <6 °C.
Total Organic Carbon (TOC) by SM 9060A	Water	28 days from collection to analysis	Cool to <6 °C; pH of <2

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Matrix Spike (MS)/ Matrix Spike Duplicate (MSD) / Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

3.1 MS/MSD Analysis

All analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory flag will be removed.

MS analysis was performed on sample MW18 (091522)_31 and MW16 (091522) for the Total organic carbon analysis. The MS analysis exhibited acceptable recoveries.

MS/MSD analysis was performed on sample MW18 (091522)_24 and DUP02 (091522) for the Sulfate analysis. The MS/MSD analysis exhibited acceptable recoveries and RPDs with the exceptions noted in the table below.

Sample ID	Analyte	MS Recovery	MSD Recovery
MW18 (091522)_24	Sulfate	<ll but="">30%</ll>	<ll but="">30%</ll>

Note:

LL - Lower control limit

The criteria used to evaluate the MS/MSD recoveries are presented in the following table. In the case of an MS/MSD deviation, the sample results are qualified as documented in the table below.

Control Limit	Sample Result	Qualification
> the upper central limit (III)	Non-detect	No Action
> the upper control limit (UL)	Detect	J
the lower central limit (LL) but > 400/	Non-detect	UJ
< the lower control limit (LL) but > 10%	Detect	J
< 10%	Non-detect	R
10%	Detect	J
Parent sample concentration > four times the MS/MSD spiking	Detect	No Action
solution concentration.	Non-detect	NO ACTION

3.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for water matrices and 35% for soil matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of one times the RL is applied for water matrices and two times the RL for soil matrices.

The laboratory duplicate analysis was performed on samples MW27 (091522) and DUP02 (091522). The laboratory duplicate analysis exhibited acceptable RPDs.

4. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result (mg/L)	Duplicate Result (mg/L)	RPD
MW-3 (091522) / DUP-02 (091522)	Sulfate	2.1	2.1	AC
	Total Organic Carbon	0.94 J	0.91 J	AC

Notes:

AC - Acceptable

The calculated differences between the parent sample and field duplicate were acceptable.

5. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analysis exhibited recoveries within the control limits.

6. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA USABILITY SUMMARY REPORT

DATA VALIDATION CHECKLIST FOR GENERAL CHEMISTRY

General Chemistry: SM 9056A and SM 9060A	Rep	orted		mance ptable	Not
	No	Yes	No	Yes	Required
Miscellaneous Instrumentation					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks	Х				Х
Laboratory Control Sample (LCS) %R		Х		Х	
Laboratory Control Sample Duplicate (LCSD) %R	Х				Х
LCS/LCSD Precision (RPD)	Х				Х
Matrix Spike (MS) %R		X	X		
Matrix Spike Duplicate (MSD) %R		Х	Х		
MS/MSD Precision (RPD)		Х		Х	
Lab Duplicate (RPD)		Х		Х	
Field Duplicate (RPD)		Х		Х	
Dilution Factor		Х		Х	
Moisture Content		Х		Х	

Notes:

%R - percent recovery

RPD - relative percent difference,

%D – difference

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DATA USABILITY SUMMARY REPORT

VALIDATION PERFORMED BY: Hrishikesh Upadhyaya

SIGNATURE:

DATE: October 26, 2022

PEER REVIEW: Dennis Capria

DATE: November 9, 2022

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CHAIN OF CUSTODY CORRECTED SAMPLE ANALYSIS DATA SHEETS

Eurofins Pittsburgh

301 Alpha Drive RIDC Park

Pittsburgh, PA 15238 Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

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👶 eurofins

Environment Testing America

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Client Contact: Ms. Shwetha Sridharan	Phone: 443 35	40186	E-Mail Jill.Coluss	sy@et.euro	finsus.co	m	State of Origin	- land	Page Page 2 of 5	
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Cytec Havre de Grace MD Site	SSOW#			S 5	17				Other:	2 - outer (specify)
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	Sampl	libbe ,	olid,	1 8	29	5 100			N isi	
Sample Identification	Sample Date Time	G=grab) BT=Tissue Preservation Co	MOSCOCOTTOWNSHOOM WORKS NOTICE	4 +					Special	Instructions/Note:
DUPOI (091422)	9/14/22 120	-	- f f	03						
	1 1/ /				 	2	+-+-+		TOALA	00-
MW18 (091522)-24	9/15/22 0810			 - -	11.		1-1-1		700	17.6
MW18 (09,522) - 31	9/15/22 082		141	<u> </u>	111	2			2.06	<u>U</u>
MW17 (091522)	9/15/22 0749	5 6 4	y 14-	431	11	2	1-1-1			
MW14I(091522)	9/15/22 0830) 6 u	o re	-31	1 1	て				
MW 23 (09 15 22) - 40	9/15/22 0900	5 G L	s un	731	1 (2				
MW 23 (0915 ZZ) -47	19/15/22 0910	0 6 0	v kh	131	1/1	2				
MW 19 DI (091522)	9/15/22 093		ver	-31	1/	2				
M4)20D1 (091522)	9/15/22 095		u wa		11	Z				
My) 3 (021522)	9/5/22 1045			1 1	1/	2	TTT			
MW16 (091522)	9/15/22 1200		v 4	31	1 7	7				
Possible Hazard Identification	19.9 - 1/20	-		1 1	posal (A	fee may be	assessed if	samples are re	tained longer than	1 month)
	son B Unknown	Radiological			To Clier	nt A	, Disposal By	Lab	Archive For	Months
Deliverable Requested: I, II, III, IV, Other (specify)			s	pecial Instr	uctions/G	C Requireme	ents:			
Empty Kit Relinquished by:/	Date:		Time	:			Method	of Shipment:		
Relinquished by	Date/Time	1450 Compan	AX/I	Received b	v.Th	WAR	50M	Date/Timer	0	Company
Relinquished by	Date/Timer	34/5 Compar	ny AMIA	Received b	M	M/1		Date/Time:	22 005	Company
Relinguished by	Date/Time	Compan	ny l	Received	\mathcal{M}			Date/Time 4	10 8 9 3	Company
CI WM 1802	111616	(100 E		2	~ ~	80				
Custody Seals Intact: Custody Seal No.:		~		Cooler Ten	nperature(s	°C and Other R	emarks:			

Eurofins Pittsburgh

301 Alpha Drive RIDC Park Pittsburgh, PA 15238 Phone: 412-963-7058 Fax: 412-963-2468

Chain of Custody Record

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Environment Testing America

Client Information Client Contact:	Sampler Andi	Feild		b PM: olùssy, Jill	L			Carrier Tra	icking No(s):	COC No ⁻ 180-83959-141	17.1
Client Contact: Ms. Shwetha Sridharan	Phone: 443 354	0186		Mail. I Colussy	@et.eurofin	ISUS COM		State of Q	igln.	loud	Page: Page 1 of 5	
Company ⁻	1 110 00 1	PWSID.			201.001.0111		haria Da		7		Job #-	
ARCADIS U.S., Inc. Address: 7550 Teague Road Suite 210	Due Date Requested: Sta	ndard				Ana	llysis Red	quested			Preservation Co	des: M - Hexane
City Hanover	TAT Requested (days):	rmal				-					A - HCL B - NaOH C - Zn Acetate	N - None O - AsNaO2 P - Na2O4S
State, Zip. MD, 21076	Compliance Project: Δ Yes			- [[]							D - Nitric Acid E - NaHSO4	Q - Na2SO3 R - Na2SO3
Phone.	PO#										F - MeOH G - Amchlor	S - H2SO4 T - TSP Dodecahydrate
302-897-8993(Tel) Email:	30005455.0002. Wo #:				0						H - Ascorbic Acid	U - Acetone V - MCAA
shwetha.sridharan@arcadis.com Project Name:	30114618 Project #				26						J - DI Water K - EDTA	W - pH 4-5 Y - Trizma
Cytec Havre de Grace MD	18017987 . SSOW#:				00						L - EDA Cother:	Z - other (specify)
Mary land	330W#.						1 1				G Other.	
,	Sample	Sample Type (C=comp,	Matrix (w=water, S=solid, O=waste/oil,	e di lice	VOCS						A MANUTON IN	
Sample Identification	Sample Date Time	G=grab)	BT=Tissue, A=A	(마) 湿 麗		50m 100/07/08 (01/0			CASSIAN PAGE		Special I	nstructions/Note:
111) 111 (1011)	9/14/22 0925		tion Boda نن									
MW14 (091422)	+ '\' \' \			IN	3 -			+				
MW 22 D (091422)	9/14/22 1000		W	VZ	3	++		+				
MW 13D (0914 ZZ)	9/14/22 1050		· W	NA	3							
MW 12D (091422)	9/14/22 1/25	_ 	4	22	9						MS/	~5/>
MW 125 (091422)	9/14/22 1115	6	W	11	3							
MW 280 (0914 ZZ)	9/14/22/1105	5 6	w	un	3							,
MW 25 I (091422)	9/14/22 1140) 6	W	un	3							Ì
MW-4(091422)	9/14/22 115	06	W	ur	3					1		
MW-61(09/422)	9/14/22 1200		W	22	3					800	e e e e e e e e e e e e e e e e e e e	
MW85 (091422)	8/14/22 1030		w	rc	3							
MW8D (0914 22)	9/14/22 1040		w	ur	3							
Possible Hazard Identification		1		Sar	ple Dispo	sal (A fe	ne				ined longer than 1	
Non-Hazard Flammable Skin Irritant Pois Deliverable Requested: I, II, III, IV, Other (specify)	son B Unknown	Radiologica	l .		Return T			Disposal E	By Lab		chive For	Months
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Empty Kit Relinquished by: Relinquished by:	Date:		Company	Time:	Received by:	/ \ .	. n 1			/(im)	7 3 3	ICompany A
						<u>) (</u>	Soil	20)		7-11	122	EGAN
Relinquished by .	Date/Time.		Company		Received by:			. ≠	Date	Time	755	Company
Relinquished by	Date/Time.		Company		Received by:	1	424		Date	/Time [,]	0	Company
Custody Seals Intact: Custody Seal No.: Δ Yes Δ No					Cooler Tempe	erațure(s) °C	and Other Re	emarks;				1
												Ver: 06/08/2021







Eurofins Pittsburgh 301 Alpha Drive RIDC Park

Chain of Custody Record

3altimore #201

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Environment Testing America

Prttsburgh, PA 15238 Phone: 412-963-7058 Fax: 412-963-2468		Jiiaiii (oi Ouste	ay it		. u				# 4	201						America
Client Information		dy F	eild		ssy, Jill	L					Carrier Tra		o(s).		1	ос no 80-83959-141	17.3
Client Contact: Ms. Shwetha Sridharan	Phone 443	35	40186	E-Mail Jill.Co	olussy(@et.eu	rofins	us.com	n		State of C	ingin Lar	, la	nd		age age 3 of 5	
Company ARCADIS U.S., Inc.			PWSID					An	nalysis	s Req	uested	$\overline{}$			Jo	ob #∙	
Address 7550 Teague Road Suite 210	Due Date Request	ed: 🧳	andas	1												reservation Co	des: M - Hexane
City·	TAT Requested (da	ays):	1				(ا					1			В	- HCL - NaOH	N - None O - AsNaO2
Hanover State, Zip	1	No	cm al			۲.	1787P	2 2								- Zn Acetate - Nitric Acid	P - Na2O4S
MD, 21076	Compliance Projec	ct: A Yes	\ No				tly	H								- NaHSO4 - MeOH	Q - Na2SO3 R - Na2S2O3
Phone 302-897-8993(Tel)	PO #· 30005455 0002				(0)		00	7	J						G H	i - Amchlor I - Ascorbic Acid	S - H2SO4 T - TSP Dodecahydrate U - Acetone
Email shwetha.sridharan@arcadis.com	wo# 30114618				0 or		9	Total	10							- ice - DI Water	V - MCAA W - pH 4-5
Project Name Cytec Havre de Grace MD	Project # ⁻ 18017987				e (Yes	760 P	Jake 1	1	H							- EDTA - EDA	Y - Trizma Z - other (specify)
Site Maryland	SSOW#·				Sampl ISD (Y	8 260 1	3 12	10	DA						o col	ther:	
		Sample	Campic	Vlatrix W=water, S=solid, =waste/oll,	eld Filtered storm WS/R	N	2007	ام الا	906						Total Number		
Sample Identification	Sample Date	Time	G=grab) вт= Preservation			·									5	Special Ir	nstructions/Note:
Dullas (acces)	9/15/22	1200	T T		\mathcal{X}	7	1		7					1 1	\uparrow		
DUFOZ (091522)	7/3/22	1200	6	W	n	3	4 ′	11				1 1					
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Possible Hazard Identification			l		Sar	nple D	ispos	al (A	fee ma	y be a	ssessec	if sam	ples a	re reta	ained	longer than 1	l month)
	son B Unkr	nown 🗀 i	Radiological					Client			isposal	By Lab		<u> </u>	rchiv	e For	Months
Deliverable Requested: I, II, III, IV, Other (specify)					Spe	ecial Ins	structi	ons/Q0	C Requi	iremen	ts:						
Empty Kit Relinquished by:		Date:			Time:						Met	hod of Sh	ipment:				
Relinquished by:	Date/Time.	122	1450 Cor	npany AN	1	Receive		TKZ	avi	RÉ	80		ate/Time		0	3	Company
Relinquished by	Date/Time	2 84	15	AWA		Réceive)						ate) Time	171	7-2	-145	Company
Relinquished by NCA TSCN	Date/Time	12 I	700 Cór	ipany		Receive	d by		/ \				ate/T me	* ·	١		Company
Custody Seals Intact: Custody Seal No.: Δ Yes Δ No						Cooler T	empera	ature(s)	°C and O	ther Ren	narks:						·









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Vinyl chloride

Toluene-d8 (Surr)

Method: SW846 EPA 8260C - Volatile Organic Compounds (GC/MS)

Client Sample ID: DUP01 (091422)

Date Collected: 09/14/22 12:00 Date Received: 09/17/22 08:55

Lab Sample ID: 180-144683-1

Matrix: Water

Dil Fac

Job ID: 180-144683-1

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	
1,1,2-Trichloroethane	ND ND	1.0	0.45	ug/L			09/22/22 10:44	
1,2-Dichloroethane	ND	1.0	0.57	ug/L			09/22/22 10:44	
Chloroform	ND	1.0	0.60	ug/L			09/22/22 10:44	
Chloroethane	ND	1.0	0.90	ug/L			09/22/22 10:44	
Methylene Chloride	ND	1.0	0.89	ug/L			09/22/22 10:44	
Tetrachloroethene	ND	1.0	0.47	ug/L			09/22/22 10:44	
Trichloroethene	ND	1.0	0.69	ug/L			09/22/22 10:44	

Carbon disulfide 09/22/22 10:44 ND 1.0 0.88 ug/L cis-1,2-Dichloroethene ND 1.0 0.71 ug/L 09/22/22 10:44 Qualifier Surrogate %Recovery Limits Prepared Analyzed Dil Fac 1,2-Dichloroethane-d4 (Surr) 80 26 - 156 09/22/22 10:44 4-Bromofluorobenzene (Surr) 99 36 - 124 09/22/22 10:44 Dibromofluoromethane (Surr) 46 - 149 09/22/22 10:44 84

40 - 146

1.0

0.41 ug/L

Client Sample ID: MW18 (091522) 24

Date Collected: 09/15/22 08:10 Date Received: 09/17/22 08:55

Lab Sample ID: 180-144683-2

09/22/22 10:44

09/22/22 10:44

Matrix: Water

Method: SW846 EPA 8260C - Volatile Organic Compounds (GC/MS)											
	Analyte	Result	Qualifier	RL	MDL	Unit					
	1,1,2-Trichloroethane	ND		1.0	0.45	ug/L					
	1,2-Dichloroethane	ND		1.0	0.57	ug/L					
	0.1	ND		4.0	0.00	/1					

ND

104

Analyte	Result	Qualitier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			09/22/22 16:36	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			09/22/22 16:36	1
Chloroform	ND		1.0	0.60	ug/L			09/22/22 16:36	1
Chloroethane	ND		1.0	0.90	ug/L			09/22/22 16:36	1
Methylene Chloride	ND		1.0	0.89	ug/L			09/22/22 16:36	1
Tetrachloroethene	ND		1.0	0.47	ug/L			09/22/22 16:36	1
Trichloroethene	ND		1.0	0.69	ug/L			09/22/22 16:36	1
Vinyl chloride	ND		1.0	0.41	ug/L			09/22/22 16:36	1
Carbon disulfide	ND		1.0	0.88	ug/L			09/22/22 16:36	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			09/22/22 16:36	1

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90	26 - 156		09/22/22 16:36	1
4-Bromofluorobenzene (Surr)	98	36 - 124		09/22/22 16:36	1
Dibromofluoromethane (Surr)	89	46 - 149		09/22/22 16:36	1
Toluene-d8 (Surr)	102	40 - 146		09/22/22 16:36	1

Method: SW846 EPA 9056	- Anions, Ion Chromatography
l	

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	14	FQ J	1.0	0.76	mg/L			09/20/22 18:06	1

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	35000	50	28	ug/L		09/26/22 11:10	10/04/22 18:22	1

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Iron	33 J	50	28 ua/L	:	10/06/22 16:00	10/14/22 12:50	1

Eurofins Pittsburgh

Job ID: 180-144683-1

Project/Site: Cytec Havre de Grace MD

Client Sample ID: MW18 (091522)_24

Lab Sample ID: 180-144683-2 Date Collected: 09/15/22 08:10

Matrix: Water

Date Received: 09/17/22 08:55

Client: ARCADIS U.S., Inc.

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad (SW846	4.9		1.0	0.51	mg/L			10/08/22 10:53	1
EPA 9060A)									

Lab Sample ID: 180-144683-3 Client Sample ID: MW18 (091522)_31

Date Collected: 09/15/22 08:20 **Matrix: Water**

Date Received: 09/17/22 08:55

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			09/22/22 17:00	1
1,2-Dichloroethane	1.0		1.0	0.57	ug/L			09/22/22 17:00	1
Chloroform	ND		1.0	0.60	ug/L			09/22/22 17:00	1
Chloroethane	ND		1.0	0.90	ug/L			09/22/22 17:00	1
Methylene Chloride	ND		1.0	0.89	ug/L			09/22/22 17:00	1
Tetrachloroethene	ND		1.0	0.47	ug/L			09/22/22 17:00	1
Trichloroethene	ND		1.0	0.69	ug/L			09/22/22 17:00	1
Vinyl chloride	ND		1.0	0.41	ug/L			09/22/22 17:00	1
Carbon disulfide	ND		1.0	0.88	ug/L			09/22/22 17:00	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			09/22/22 17:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		26 - 156			-		09/22/22 17:00	1
4-Bromofluorobenzene (Surr)	91		36 - 124					09/22/22 17:00	1
Dibromofluoromethane (Surr)	87		46 - 149					09/22/22 17:00	1
Toluene-d8 (Surr)	97		40 - 146					09/22/22 17:00	1

Method: SW846 EPA 9056A - Anio	ns, Ion	Chromatogra	aphy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	14		1.0	0.76	mg/L			09/20/22 18:50	1

Method: SW846 EPA 6020A - N	lletals (ICP/MS) - Total Re	ecoverable	•				
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Iron	16000	50	28 ug/L		09/26/22 11:10	10/04/22 18:25	1

 Method: SW846 EPA 6020A - N	Metals (ICP/MS) - Dissolv	red						
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	63	50	28	ug/L		10/06/22 16:00	10/14/22 12:53	1

General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Organic Carbon - Quad (SW846	4.3		1.0	0.51	mg/L			10/08/22 12:59	1	

Lab Sample ID: 180-144683-4 **Client Sample ID: MW27 (091522) Matrix: Water**

Date Collected: 09/15/22 07:45 Date Received: 09/17/22 08:55

Method: SW846 EPA 8260	C - Volatile Organic Compou	ınds (GC/N	(IS)					
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	2.2	1.0	0.45	ug/L			09/22/22 17:23	1
1,2-Dichloroethane	3.0	1.0	0.57	ug/L			09/22/22 17:23	1
Chloroform	ND	1.0	0.60	ug/L			09/22/22 17:23	1

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10/17/2022

Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Client Sample ID: MW27 (091522)

Date Collected: 09/15/22 07:45 Date Received: 09/17/22 08:55

Lab Sample ID: 180-144683-4

Matrix: Water

Job ID: 180-144683-1

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	5.4	1.0	0.90	ug/L			09/22/22 17:23	1
Methylene Chloride	ND	1.0	0.89	ug/L			09/22/22 17:23	1
Tetrachloroethene	ND	1.0	0.47	ug/L			09/22/22 17:23	1
Trichloroethene	5.9	1.0	0.69	ug/L			09/22/22 17:23	1
Vinyl chloride	5.7	1.0	0.41	ug/L			09/22/22 17:23	1
Carbon disulfide	ND	1.0	0.88	ug/L			09/22/22 17:23	1
cis-1,2-Dichloroethene	4.5	1.0	0.71	ug/L			09/22/22 17:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		26 - 156		09/22/22 17:23	
4-Bromofluorobenzene (Surr)	95		36 - 124		09/22/22 17:23	1
Dibromofluoromethane (Surr)	86		46 - 149		09/22/22 17:23	1
Toluene-d8 (Surr)	100		40 - 146		09/22/22 17:23	1

Method: SW846 EPA 9056A - Anions, Ion Chromatography											
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
Sulfate	2.3		1.0	0.76	mg/L			09/20/22 19:05	1		

Method: SW846 EPA 6020A - Metals (ICP/MS) - Total Recoverable										
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac			
Iron	22000	50	28 ug/L		09/26/22 11:10	10/04/22 18:29	1			

Method: SW846 EPA 6020A - I	Metals (ICP/MS) - Dissolv	ved					
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Iron	530	50	28 ug/L		10/06/22 16:00	10/14/22 12:56	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad (SW846 EPA 9060A)	0.68	J	1.0	0.51	mg/L			10/08/22 13:46	1

Client Sample ID: MW14I (091522)

Lab Sample ID: 180-144683-5 Date Collected: 09/15/22 08:30 **Matrix: Water** Date Received: 09/17/22 08:55

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			09/22/22 17:47	1
1,2-Dichloroethane	5.3		1.0	0.57	ug/L			09/22/22 17:47	1
Chloroform	ND		1.0	0.60	ug/L			09/22/22 17:47	1
Chloroethane	ND		1.0	0.90	ug/L			09/22/22 17:47	1
Methylene Chloride	ND		1.0	0.89	ug/L			09/22/22 17:47	1
Tetrachloroethene	ND		1.0	0.47	ug/L			09/22/22 17:47	1
Trichloroethene	ND		1.0	0.69	ug/L			09/22/22 17:47	1
Vinyl chloride	ND		1.0	0.41	ug/L			09/22/22 17:47	1
Carbon disulfide	ND		1.0	0.88	ug/L			09/22/22 17:47	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			09/22/22 17:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		26 - 156		09/22/22 17:47	1
4-Bromofluorobenzene (Surr)	98		36 - 124		09/22/22 17:47	1
Dibromofluoromethane (Surr)	87		46 - 149		09/22/22 17:47	1

Eurofins Pittsburgh

Client: ARCADIS U.S., Inc. Job ID: 180-144683-1

Project/Site: Cytec Havre de Grace MD

Date Received: 09/17/22 08:55

Client Sample ID: MW14I (091522)

Date Collected: 09/15/22 08:30

Lab Sample ID: 180-144683-5

Matrix: Water

Method: SW846 EPA 8260C - Volatile Organic Compounds (GC/MS) (Continued)

%Recovery Qualifier Limits Prepared Analyzed Dil Fac Toluene-d8 (Surr) 103 40 - 146 09/22/22 17:47

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte Result Qualifier RL MDL Unit D Prepared Analyzed Dil Fac Sulfate 54 1.0 0.76 mg/L 09/20/22 19:20

Method: SW846 EPA 6020A - Metals (ICP/MS) - Total Recoverable

Result Qualifier MDL Unit D Analyte RL Prepared Analyzed Dil Fac 09/26/22 11:10 10/04/22 18:32 Iron 20000 50 28 ug/L

Method: SW846 EPA 6020A - Metals (ICP/MS) - Dissolved

Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac Iron 50 10/06/22 16:00 10/14/22 13:00 $\overline{\mathsf{ND}}$ 28 ug/L

General Chemistry

Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Total Organic Carbon - Quad (SW846 1.0 0.51 mg/L 10/08/22 14:34 1.9 EPA 9060A)

Client Sample ID: MW23 (091522) 40

Lab Sample ID: 180-144683-6 Date Collected: 09/15/22 09:00 **Matrix: Water** Date Received: 09/17/22 08:55

Method: SW846 EPA 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND ND	1.0	0.45	ug/L			09/23/22 09:47	1
1,2-Dichloroethane	11	1.0	0.57	ug/L			09/23/22 09:47	1
Chloroform	ND	1.0	0.60	ug/L			09/23/22 09:47	1
Chloroethane	2.0	1.0	0.90	ug/L			09/23/22 09:47	1
Methylene Chloride	ND	1.0	0.89	ug/L			09/23/22 09:47	1
Tetrachloroethene	ND	1.0	0.47	ug/L			09/23/22 09:47	1
Trichloroethene	ND	1.0	0.69	ug/L			09/23/22 09:47	1
Vinyl chloride	ND	1.0	0.41	ug/L			09/23/22 09:47	1
Carbon disulfide	ND	1.0	0.88	ug/L			09/23/22 09:47	1
cis-1,2-Dichloroethene	0.86 J	1.0	0.71	ug/L			09/23/22 09:47	1

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100	26 - 156		09/23/22 09:47	1
4-Bromofluorobenzene (Surr)	88	36 - 124		09/23/22 09:47	1
Dibromofluoromethane (Surr)	97	46 - 149		09/23/22 09:47	1
Toluene-d8 (Surr)	102	40 - 146		09/23/22 09:47	1

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Sulfate 0.76 mg/L 1.0 09/20/22 19:35 57

Method: SW846 EPA 6020A - Metals (ICP/MS) - Total Recoverable

Analyte Result Qualifier **MDL** Unit RL Prepared Analyzed Dil Fac Iron 10000 50 28 ug/L 09/26/22 11:10 10/04/22 18:36

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Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Client Sample ID: MW23 (091522)_40

Date Collected: 09/15/22 09:00 Date Received: 09/17/22 08:55 Lab Sample ID: 180-144683-6

Matrix: Water

Job ID: 180-144683-1

hotylenA

Method: SW846 EPA 60	20A - Metals (ICP/MS) - Dissolved
Analyto	Pocult Qualifier

Allalyte	Result Qua	illiel KL	MIDL	Ullit	 ,	riepaieu	Allalyzeu	DII Fac
Iron	ND	50	28	ug/L		0/06/22 16:00	10/14/22 13:03	1
								

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad (SW846	0.96	J	1.0	0.51	mg/L			10/08/22 14:58	1
EPA 9060A)									

Client Sample ID: MW23 (091522)_47

Date Collected: 09/15/22 09:10 Date Received: 09/17/22 08:55 Lab Sample ID: 180-144683-7

Matrix: Water

Method: SW846 EDA 8260C - Volatile Organic Compounds (GC/MS

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND ND	1.0	0.45	ug/L			09/23/22 11:13	1
1,2-Dichloroethane	9.5	1.0	0.57	ug/L			09/23/22 11:13	1
Chloroform	ND	1.0	0.60	ug/L			09/23/22 11:13	1
Chloroethane	3.0	1.0	0.90	ug/L			09/23/22 11:13	1
Methylene Chloride	ND	1.0	0.89	ug/L			09/23/22 11:13	1
Tetrachloroethene	ND	1.0	0.47	ug/L			09/23/22 11:13	1
Trichloroethene	ND	1.0	0.69	ug/L			09/23/22 11:13	1
Vinyl chloride	ND	1.0	0.41	ug/L			09/23/22 11:13	1
Carbon disulfide	ND	1.0	0.88	ug/L			09/23/22 11:13	1
cis-1,2-Dichloroethene	0.89 J	1.0	0.71	ug/L			09/23/22 11:13	1

Surrogate	%Recovery Qualifier	Limits	Prepared Analyz	zed Dil Fac
1,2-Dichloroethane-d4 (Surr)	98	26 - 156	09/23/22	11:13
4-Bromofluorobenzene (Surr)	87	36 - 124	09/23/22	11:13 1
Dibromofluoromethane (Surr)	92	46 - 149	09/23/22	11:13 1
Toluene-d8 (Surr)	102	40 - 146	09/23/22	11:13 1

Method: SW846 EPA 9056A	- Anions,	lon	Ch	romatography
	_		_	

Analyte		ualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	59	1.0	0.76	mg/L			09/20/22 19:50	1

Method: SW846 EPA	6020A - Metals	(ICP/MS)	- Total	Recoverable

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Iron	12000	50	28 ug/L		09/26/22 11:10	10/04/22 18:39	1

Method: SW846 EPA	6020A - Metals	(ICP/MS)	- Dissolved
		(,	

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac	
Iron	47 J	50	28 ua/L		10/06/22 16:00	10/14/22 13:06	1	

General Chemistry

Contra Chombary									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad (SW846	0.92	J	1.0	0.51	mg/L			10/08/22 15:22	1
===									

EPA 9060A)

Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Client Sample ID: MW19DI (091522)

Date Collected: 09/15/22 09:30 Date Received: 09/17/22 08:55 Lab Sample ID: 180-144683-8

Matrix: Water

Job ID: 180-144683-1

Daguille			/IS)					
Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
ND		1.0	0.45	ug/L			09/23/22 14:47	1
ND		1.0	0.60	ug/L			09/23/22 14:47	1
ND		1.0	0.90	ug/L			09/23/22 14:47	1
ND		1.0	0.89	ug/L			09/23/22 14:47	1
ND		1.0	0.47	ug/L			09/23/22 14:47	1
ND		1.0	0.69	ug/L			09/23/22 14:47	1
ND		1.0	0.41	ug/L			09/23/22 14:47	1
ND		1.0	0.88	ug/L			09/23/22 14:47	1
ND		1.0	0.71	ug/L			09/23/22 14:47	1
%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
88		26 - 156			-		09/23/22 14:47	1
74		36 - 124					09/23/22 14:47	1
83		46 - 149					09/23/22 14:47	1
95		40 - 146					09/23/22 14:47	1
	ND N	ND AB	ND 1.0 WRecovery Qualifier Limits 88 26 - 156 74 36 - 124 83 46 - 149	ND 1.0 0.45 ND 1.0 0.60 ND 1.0 0.90 ND 1.0 0.89 ND 1.0 0.47 ND 1.0 0.41 ND 1.0 0.88 ND 1.0 0.71 **Recovery* Qualifier Limits 88 26 - 156 74 36 - 124 83 46 - 149	ND 1.0 0.45 ug/L ND 1.0 0.60 ug/L ND 1.0 0.90 ug/L ND 1.0 0.89 ug/L ND 1.0 0.47 ug/L ND 1.0 0.69 ug/L ND 1.0 0.41 ug/L ND 1.0 0.88 ug/L ND 1.0 0.71 ug/L **Recovery* Qualifier Limits 26 - 156 74 36 - 124 83 46 - 149	ND 1.0 0.45 ug/L ND 1.0 0.60 ug/L ND 1.0 0.90 ug/L ND 1.0 0.89 ug/L ND 1.0 0.47 ug/L ND 1.0 0.69 ug/L ND 1.0 0.69 ug/L ND 1.0 0.41 ug/L ND 1.0 0.88 ug/L ND 1.0 0.88 ug/L ND 1.0 0.71 ug/L **Recovery Qualifier Limits **88 26-156 74 36-124 83 46-149	ND 1.0 0.45 ug/L ND 1.0 0.60 ug/L ND 1.0 0.90 ug/L ND 1.0 0.89 ug/L ND 1.0 0.47 ug/L ND 1.0 0.69 ug/L ND 1.0 0.69 ug/L ND 1.0 0.88 ug/L ND 1.0 0.88 ug/L ND 1.0 0.88 ug/L ND 1.0 0.71 ug/L ND 1.0 0.71 ug/L **Recovery Qualifier Limits Prepared** 88 26-156 74 36-124 83 46-149	ND 1.0 0.45 ug/L 09/23/22 14:47 ND 1.0 0.60 ug/L 09/23/22 14:47 ND 1.0 0.90 ug/L 09/23/22 14:47 ND 1.0 0.89 ug/L 09/23/22 14:47 ND 1.0 0.47 ug/L 09/23/22 14:47 ND 1.0 0.69 ug/L 09/23/22 14:47 ND 1.0 0.41 ug/L 09/23/22 14:47 ND 1.0 0.88 ug/L 09/23/22 14:47 ND 1.0 0.71 ug/L 09/23/22 14:47 ND 1.0 0.71 ug/L 09/23/22 14:47 WRecovery Qualifier Limits Prepared Analyzed 88 26 - 156 09/23/22 14:47 74 36 - 124 09/23/22 14:47 83 46 - 149 09/23/22 14:47

Method: SW846 EPA 82600	- Volatile Org	anic Comp	oounds (GC/I	/IS) - DL					
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	52	D	5.0	2.9	ug/L			09/23/22 16:34	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		26 - 156					09/23/22 16:34	5
4-Bromofluorobenzene (Surr)	82		36 - 124					09/23/22 16:34	5
Dibromofluoromethane (Surr)	88		46 - 149					09/23/22 16:34	5
Toluene-d8 (Surr)	100		40 - 146					09/23/22 16:34	5

_ 	Anions, Ion	Chromatogr	aphy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	29		1.0	0.76	mg/L			09/20/22 20:34	1

Method: SW846 EPA 6020A - M	etals (ICP/MS) - Total R	ecoverable	•			
Analyte	Result Qualifier	RL	MDL Unit	D Prepared	Analyzed	Dil Fac
Iron	22000	50	28 ug/L	09/29/22 12:30	10/04/22 14:31	1

Method: SW846 EPA 6020A	- Metals (ICP/I	MS) - Dissol	ved						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		50	28	ug/L		10/06/22 16:00	10/14/22 13:10	1
General Chemistry									

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad (SW846	1.0		1.0	0.51	mg/L			10/08/22 15:46	1
EPA 9060A)									

Lab Sample ID: 180-144683-9 Client Sample ID: MW20DI (091522) Date Collected: 09/15/22 09:50 **Matrix: Water**

Date Received: 09/17/22 08:55

Method: SW846 EPA 8260	C - Volatile Organ	nic Compou	ınds (GC/N	IS)					
Analyte	Result C	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			09/23/22 12:17	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			09/23/22 12:17	1
Chloroform	ND		1.0	0.60	ug/L			09/23/22 12:17	1

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Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Client Sample ID: MW20DI (091522)

Date Collected: 09/15/22 09:50 Date Received: 09/17/22 08:55

Dibromofluoromethane (Surr)

Lab Sample ID: 180-144683-9

Matrix: Water

Job ID: 180-144683-1

Method: SW846 EPA 8260	C - Volatile Organic Com	pounds (GC	/MS) (Coi	ntinued)				
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND ND	1.0	0.90	ug/L			09/23/22 12:17	1
Methylene Chloride	ND	1.0	0.89	ug/L			09/23/22 12:17	1
Tetrachloroethene	ND	1.0	0.47	ug/L			09/23/22 12:17	1
Trichloroethene	ND	1.0	0.69	ug/L			09/23/22 12:17	1
Vinyl chloride	ND	1.0	0.41	ug/L			09/23/22 12:17	1
Carbon disulfide	ND	1.0	0.88	ug/L			09/23/22 12:17	1
cis-1,2-Dichloroethene	ND	1.0	0.71	ug/L			09/23/22 12:17	1
Surrogate	%Recovery Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualific	er Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99	26 - 156	<u></u>	9/23/22 12:17	1
4-Bromofluorobenzene (Surr)	89	36 - 124	0	9/23/22 12:17	1
Dibromofluoromethane (Surr)	94	46 - 149	0	9/23/22 12:17	1
Toluene-d8 (Surr)	101	40 - 146	Ö	9/23/22 12:17	1

Method: SW846 EPA 9056A - A	Inions, Ion	Chromatogr	aphy						
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	17		1.0	0.76	mg/L			09/20/22 20:49	1

Method: SW846 EPA 6020A -	Metals (ICP/I	MS) - Total R	ecoverable)					
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	36000		50	28	ug/L		09/29/22 12:30	10/04/22 14:35	1

Method: SW846 EPA 6020A - N	Metals (ICP/MS) - Dissol	ved					
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND -	50	28 ug/L		10/06/22 16:00	10/14/22 13:13	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad (SW846	0.99	J	1.0	0.51	mg/L			10/08/22 16:10	1
EPA 9060A)									

Client Sample ID: MW3 (091522) Lab Sample ID: 180-144683-10

Date Collected: 09/15/22 10:45 Matrix: Water Date Received: 09/17/22 08:55

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		10	4.5	ug/L			09/23/22 11:34	10
1,2-Dichloroethane	34		10	5.7	ug/L			09/23/22 11:34	10
Chloroform	ND		10	6.0	ug/L			09/23/22 11:34	10
Chloroethane	ND		10	9.0	ug/L			09/23/22 11:34	10
Methylene Chloride	27		10	8.9	ug/L			09/23/22 11:34	10
Tetrachloroethene	ND		10	4.7	ug/L			09/23/22 11:34	10
Trichloroethene	ND		10	6.9	ug/L			09/23/22 11:34	10
Vinyl chloride	91		10	4.1	ug/L			09/23/22 11:34	10
Carbon disulfide	ND		10	8.8	ug/L			09/23/22 11:34	10
cis-1,2-Dichloroethene	ND		10	7.1	ug/L			09/23/22 11:34	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		26 - 156					09/23/22 11:34	10
4-Bromofluorobenzene (Surr)	85		36 - 124					09/23/22 11:34	10

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09/23/22 11:34

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Client: ARCADIS U.S., Inc. Job ID: 180-144683-1

Project/Site: Cytec Havre de Grace MD

Client Sample ID: MW3 (091522)

Lab Sample ID: 180-144683-10 Date Collected: 09/15/22 10:45

Matrix: Water Date Received: 09/17/22 08:55

Surrogate	%Recovery	Qualifier Li	imits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	106	40	<u>0 - 146</u>		09/23/22 11:34	10

1		
	Method: SW846 EPA 9056A - Anions,	Ion Chromatography
	method: Otto-to El A 5000A - Amons,	ion omatography

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	2.1	1.0	0.76 mg/L			09/20/22 21:04	1

Method: SW846 EPA	6020A - Motals	(ICP/MS)	- Total Recoverable
I WICHIOU. 300040 EFA	OUZUM - WIELAIS	(ICF/IVIS)	- IUlai Necoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	1900	J	50	28	ug/L		09/29/22 12:30	10/04/22 14:38	1

Method: SW846 EPA 6020A - Metals (ICP/MS) - Dissolved

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND	50	28 ug/L		10/06/22 16:00	10/14/22 13:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad (SW846	0.94	J	1.0	0.51	mg/L			10/08/22 16:33	1
EPA 9060A)									

Client Sample ID: MW16 (091522)

Lab Sample ID: 180-144683-11 Date Collected: 09/15/22 12:00 **Matrix: Water** Date Received: 09/17/22 08:55

Method: SW846 EPA 8260C -	Volatile	Organic	: Compounds	(GC/MS)
	_				_

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND	1.0	0.45	ug/L			09/23/22 11:56	1
1,2-Dichloroethane	ND	1.0	0.57	ug/L			09/23/22 11:56	1
Chloroform	ND	1.0	0.60	ug/L			09/23/22 11:56	1
Chloroethane	ND	1.0	0.90	ug/L			09/23/22 11:56	1
Methylene Chloride	ND	1.0	0.89	ug/L			09/23/22 11:56	1
Tetrachloroethene	ND	1.0	0.47	ug/L			09/23/22 11:56	1
Trichloroethene	3.7	1.0	0.69	ug/L			09/23/22 11:56	1
Vinyl chloride	4.6	1.0	0.41	ug/L			09/23/22 11:56	1
Carbon disulfide	ND	1.0	0.88	ug/L			09/23/22 11:56	1
cis-1,2-Dichloroethene	6.7	1.0	0.71	ug/L			09/23/22 11:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		26 - 156		09/23/22 11:56	1
4-Bromofluorobenzene (Surr)	89		36 - 124		09/23/22 11:56	1
Dibromofluoromethane (Surr)	96		46 - 149		09/23/22 11:56	1
Toluene-d8 (Surr)	99		40 - 146		09/23/22 11:56	1

Method: SW846 EPA 9056A - Anions, Ion Chromatography

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	6.8	1.0	0.76 mg/L			09/20/22 21:19	<u>_</u>

Method: SW846 EPA 6020A - Metals (ICP/MS) - Total Recoverable

Analyte		ialifier RL	MDL	Unit E	Prepared	Analyzed	Dil Fac
Iron	9900	50	28	ug/L	09/29/22 12:30	10/04/22 14:42	1

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10/17/2022

Job ID: 180-144683-1

Project/Site: Cytec Havre de Grace MD

Client Sample ID: MW16 (091522)

Date Collected: 09/15/22 12:00

Client: ARCADIS U.S., Inc.

Date Received: 09/17/22 08:55

Lab Sample ID: 180-144683-11

Matrix: Water

Method: SW846 EPA 6020A - Metals (ICP/MS) - Dissolved									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	ND		50	28	ug/L		10/06/22 16:00	10/14/22 13:26	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad (SW846 EPA 9060A)	1.3		1.0	0.51	mg/L			10/08/22 18:39	1

Client Sample ID: DUP02 (091522)

Date Collected: 09/15/22 12:00 Date Received: 09/17/22 08:55

Lab Sample ID: 180-144683-12

Matrix: Water

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND ND	5.0	2.3	ug/L			09/22/22 15:09	5
1,2-Dichloroethane	38	5.0	2.9	ug/L			09/22/22 15:09	5
Chloroform	ND	5.0	3.0	ug/L			09/22/22 15:09	5
Chloroethane	ND	5.0	4.5	ug/L			09/22/22 15:09	5
Methylene Chloride	31	5.0	4.4	ug/L			09/22/22 15:09	5
Tetrachloroethene	ND	5.0	2.3	ug/L			09/22/22 15:09	5
Trichloroethene	ND	5.0	3.4	ug/L			09/22/22 15:09	5
Vinyl chloride	100	5.0	2.0	ug/L			09/22/22 15:09	5
Carbon disulfide	ND	5.0	4.4	ug/L			09/22/22 15:09	5
cis-1,2-Dichloroethene	ND	5.0	3.5	ug/L			09/22/22 15:09	5
Surrogate	%Recovery Qualifier	Limits				Prepared	Analyzed	Dil Fac

Surrogate	%Recovery	Qualifier	Limits	Prepared Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		26 - 156	09/22/22 15:09	5
4-Bromofluorobenzene (Surr)	88		36 - 124	09/22/22 15:09	5
Dibromofluoromethane (Surr)	92		46 - 149	09/22/22 15:09	5
Toluene-d8 (Surr)	108		40 - 146	09/22/22 15:09	5

Method: SW846 EPA 9056A - Anions, Ion Chromatography									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	2.1		1.0	0.76	mg/L			09/20/22 21:34	1

Method: SW846 EPA 6020A - N	Metals (ICP/MS) - Total R	ecoverable)				
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Iron	4800	50	28 ug/L		09/27/22 13:15	10/05/22 18:58	1

Method: SW846 EPA 6020A - Metals (ICP/MS) - Dissolved									
	Analyte	Result Qu	alifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Iron	ND	50	28	ug/L		10/06/22 16:00	10/14/22 13:30	1

General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon - Quad (SW846	0.91	J	1.0	0.51	mg/L			10/08/22 19:27	1

Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Client Sample ID: MW14(091422)

Lab Sample ID: 180-144683-13 Date Collected: 09/14/22 09:25

Matrix: Water

09/22/22 19:48

09/22/22 19:48

09/22/22 19:48

Job ID: 180-144683-1

Date Received: 09/17/22 08:55

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			09/22/22 19:48	1
1,2-Dichloroethane	3.0		1.0	0.57	ug/L			09/22/22 19:48	1
Chloroform	ND		1.0	0.60	ug/L			09/22/22 19:48	1
Chloroethane	ND		1.0	0.90	ug/L			09/22/22 19:48	1
Methylene Chloride	ND		1.0	0.89	ug/L			09/22/22 19:48	1
Tetrachloroethene	ND		1.0	0.47	ug/L			09/22/22 19:48	1
Trichloroethene	ND		1.0	0.69	ug/L			09/22/22 19:48	1
Vinyl chloride	ND		1.0	0.41	ug/L			09/22/22 19:48	1
Carbon disulfide	ND		1.0	0.88	ug/L			09/22/22 19:48	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			09/22/22 19:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		26 - 156					09/22/22 19:48	1

36 - 124

46 - 149

40 - 146

Client Sample ID: MW22D(091422) Lab Sample ID: 180-144683-14

Date Collected: 09/14/22 10:00 Date Received: 09/17/22 08:55

4-Bromofluorobenzene (Surr)

Dibromofluoromethane (Surr)

Toluene-d8 (Surr)

Matrix: Water

Method: SW846 EPA 8260C - Volatile Organic Compounds (GC/MS)

87

85

103

			Totalio organio compoundo (cormo)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac				
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L			09/23/22 10:09	1				
1,2-Dichloroethane	0.65	J	1.0	0.57	ug/L			09/23/22 10:09	1				
Chloroform	ND		1.0	0.60	ug/L			09/23/22 10:09	1				
Chloroethane	ND		1.0	0.90	ug/L			09/23/22 10:09	1				
Methylene Chloride	ND		1.0	0.89	ug/L			09/23/22 10:09	1				
Tetrachloroethene	ND		1.0	0.47	ug/L			09/23/22 10:09	1				
Trichloroethene	ND		1.0	0.69	ug/L			09/23/22 10:09	1				
Vinyl chloride	ND		1.0	0.41	ug/L			09/23/22 10:09	1				
Carbon disulfide	ND		1.0	0.88	ug/L			09/23/22 10:09	1				
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			09/23/22 10:09	1				

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93	26 - 156		09/23/22 10:09	1
4-Bromofluorobenzene (Surr)	87	36 - 124		09/23/22 10:09	1
Dibromofluoromethane (Surr)	89	46 - 149		09/23/22 10:09	1
Toluene-d8 (Surr)	108	40 - 146		09/23/22 10:09	1

Lab Sample ID: 180-144683-15 Client Sample ID: MW13D(091422)

Date Collected: 09/14/22 10:55 Date Received: 09/17/22 08:55

Method: SW846 EPA 8260C	- volatile Organic Compo	unas (GC/N	15)				
Analyte	Result Qualifier	RL	MDL Uni	it D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND ND	1.0	0.45 ug/L	L .		09/22/22 16:35	1
1,2-Dichloroethane	22	1.0	0.57 ug/L	L		09/22/22 16:35	1
Chloroform	ND	1.0	0.60 ug/L	L		09/22/22 16:35	1
Chloroethane	ND	1.0	0.90 ug/L	L		09/22/22 16:35	1
Methylene Chloride	ND	1.0	0.89 ug/L	L		09/22/22 16:35	1

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Matrix: Water

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Matrix: Water

Client Sample ID: MW13D(091422)

Date Collected: 09/14/22 10:55 Date Received: 09/17/22 08:55 Lab Sample ID: 180-144683-15

Lab Sample ID: 180-144683-16

Matrix: Water

Method: SW846 EPA	8260C - Volatile Organic Compound	s (GC/MS) (Continued)
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Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	0.79	J	1.0	0.47	ug/L			09/22/22 16:35	1
Trichloroethene	3.0		1.0	0.69	ug/L			09/22/22 16:35	1
Vinyl chloride	ND		1.0	0.41	ug/L			09/22/22 16:35	1
Carbon disulfide	ND		1.0	0.88	ug/L			09/22/22 16:35	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			09/22/22 16:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		26 - 156			-		09/22/22 16:35	1

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		26 - 156	_		09/22/22 16:35	1
4-Bromofluorobenzene (Surr)	85		36 - 124			09/22/22 16:35	1
Dibromofluoromethane (Surr)	85		46 - 149			09/22/22 16:35	1
Toluene-d8 (Surr)	98		40 - 146			09/22/22 16:35	1

Client Sample ID: MW12D(091422)

Date Collected: 09/14/22 11:25

Date Received: 09/17/22 08:55

Method: SW846 EPA 8260	C - Volatile Organic Comp	ounds (GC/N	NS)					
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND ND	1.0	0.45	ug/L			09/22/22 09:34	1
1,2-Dichloroethane	ND	1.0	0.57	ug/L			09/22/22 09:34	1
Chloroform	ND	1.0	0.60	ug/L			09/22/22 09:34	1
Chloroethane	ND	1.0	0.90	ug/L			09/22/22 09:34	1
Methylene Chloride	ND	1.0	0.89	ug/L			09/22/22 09:34	1
Tetrachloroethene	ND	1.0	0.47	ug/L			09/22/22 09:34	1
Trichloroethene	ND	1.0	0.69	ug/L			09/22/22 09:34	1
Vinyl chloride	ND	1.0	0.41	ug/L			09/22/22 09:34	1
Carbon disulfide	ND	1.0	0.88	ug/L			09/22/22 09:34	1
cis-1 2-Dichloroethene	ND	1.0	0.71	ua/l			09/22/22 09:34	1

Surrogate	%Recovery Qualifie	r Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90	26 - 156		09/22/22 09:34	1
4-Bromofluorobenzene (Surr)	104	36 - 124		09/22/22 09:34	1
Dibromofluoromethane (Surr)	89	46 - 149		09/22/22 09:34	1
Toluene-d8 (Surr)	107	40 - 146		09/22/22 09:34	1

Client Sample ID: MW12S(091422)

Date Collected: 09/14/22 11:15 Date Received: 09/17/22 08:55 Lab Sample ID: 180-144683-17 **Matrix: Water**

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND ND	1.0	0.45	ug/L			09/22/22 16:56	1
1,2-Dichloroethane	ND	1.0	0.57	ug/L			09/22/22 16:56	1
Chloroform	ND	1.0	0.60	ug/L			09/22/22 16:56	1
Chloroethane	ND	1.0	0.90	ug/L			09/22/22 16:56	1
Methylene Chloride	ND	1.0	0.89	ug/L			09/22/22 16:56	1
Tetrachloroethene	ND	1.0	0.47	ug/L			09/22/22 16:56	1
Trichloroethene	ND	1.0	0.69	ug/L			09/22/22 16:56	1
Vinyl chloride	ND	1.0	0.41	ug/L			09/22/22 16:56	1
Carbon disulfide	ND	1.0	0.88	ug/L			09/22/22 16:56	1
cis-1,2-Dichloroethene	ND	1.0	0.71	ug/L			09/22/22 16:56	1

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Job ID: 180-144683-1

Client: ARCADIS U.S., Inc. Project/Site: Cytec Havre de Grace MD

Client Sample ID: MW12S(091422)

Date Collected: 09/14/22 11:15 Date Received: 09/17/22 08:55 Lab Sample ID: 180-144683-17

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		26 - 156	09/22/22 16:56	1
4-Bromofluorobenzene (Surr)	84		36 - 124	09/22/22 16:56	1
Dibromofluoromethane (Surr)	85		46 - 149	09/22/22 16:56	1
Toluene-d8 (Surr)	101		40 - 146	09/22/22 16:56	1

Lab Sample ID: 180-144683-18 Client Sample ID: MW28D(091422)

Date Collected: 09/14/22 11:05 Date Received: 09/17/22 08:55

Matrix: Water

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND ND	50	23	ug/L			09/22/22 17:18	50
1,2-Dichloroethane	1600	50	29	ug/L			09/22/22 17:18	50
Chloroform	ND	50	30	ug/L			09/22/22 17:18	50
Chloroethane	ND	50	45	ug/L			09/22/22 17:18	50
Methylene Chloride	ND	50	44	ug/L			09/22/22 17:18	50
Tetrachloroethene	ND	50	23	ug/L			09/22/22 17:18	50
Trichloroethene	ND	50	34	ug/L			09/22/22 17:18	50
Vinyl chloride	ND	50	20	ug/L			09/22/22 17:18	50
Carbon disulfide	ND	50	44	ug/L			09/22/22 17:18	50
cis-1,2-Dichloroethene	ND	50	35	ug/L			09/22/22 17:18	50

Surrogate	%Recovery Qua	alifier Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88	26 - 156		09/22/22 17:18	50
4-Bromofluorobenzene (Surr)	83	36 - 124		09/22/22 17:18	50
Dibromofluoromethane (Surr)	84	46 - 149		09/22/22 17:18	50
Toluene-d8 (Surr)	103	40 - 146		09/22/22 17:18	50

Client Sample ID: MW25I(091422)

Date Collected: 09/14/22 11:40 Date Received: 09/17/22 08:55 Lab Sample ID: 180-144683-19

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	0.61	J	1.0	0.45	ug/L			09/22/22 17:39	1
1,2-Dichloroethane	2.0		1.0	0.57	ug/L			09/22/22 17:39	1
Chloroform	0.76	J	1.0	0.60	ug/L			09/22/22 17:39	1
Chloroethane	ND		1.0	0.90	ug/L			09/22/22 17:39	1
Methylene Chloride	ND		1.0	0.89	ug/L			09/22/22 17:39	1
Tetrachloroethene	0.67	J	1.0	0.47	ug/L			09/22/22 17:39	1
Trichloroethene	6.1		1.0	0.69	ug/L			09/22/22 17:39	1
Vinyl chloride	ND		1.0	0.41	ug/L			09/22/22 17:39	1
Carbon disulfide	ND		1.0	0.88	ug/L			09/22/22 17:39	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			09/22/22 17:39	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		26 - 156			•		09/22/22 17:39	1
4-Bromofluorobenzene (Surr)	87		36 - 124					09/22/22 17:39	1
Dibromofluoromethane (Surr)	85		46 - 149					09/22/22 17:39	1
Toluene-d8 (Surr)	102		40 - 146					09/22/22 17:39	1

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Client: ARCADIS U.S., Inc.

Project/Site: Cytec Havre de Grace MD

Client Sample ID: MW-4(091422)

Date Collected: 09/14/22 11:50 Date Received: 09/17/22 08:55 Lab Sample ID: 180-144683-20

Matrix: Water

Method: SW846 EPA 8260C - Volatile Organic Compounds (GC/MS)

	o rolutino organ	no compoundo (co	,,,,,					
Analyte	Result C	Qualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND ND	1.0	0.45	ug/L			09/22/22 18:01	1
1,2-Dichloroethane	ND	1.0	0.57	ug/L			09/22/22 18:01	1
Chloroform	ND	1.0	0.60	ug/L			09/22/22 18:01	1
Chloroethane	ND	1.0	0.90	ug/L			09/22/22 18:01	1
Methylene Chloride	ND	1.0	0.89	ug/L			09/22/22 18:01	1
Tetrachloroethene	ND	1.0	0.47	ug/L			09/22/22 18:01	1
Trichloroethene	ND	1.0	0.69	ug/L			09/22/22 18:01	1
Vinyl chloride	ND	1.0	0.41	ug/L			09/22/22 18:01	1
Carbon disulfide	ND	1.0	0.88	ug/L			09/22/22 18:01	1
cis-1,2-Dichloroethene	ND	1.0	0.71	ug/L			09/22/22 18:01	1

Surrogate	%Recovery Qu	Qualifier Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96	26 - 156		09/22/22 18:01	1
4-Bromofluorobenzene (Surr)	89	36 - 124		09/22/22 18:01	1
Dibromofluoromethane (Surr)	89	46 - 149		09/22/22 18:01	1
Toluene-d8 (Surr)	95	40 - 146		09/22/22 18:01	1

Client Sample ID: MW-6I(091422)

Date Collected: 09/14/22 12:00

Analyte

Date Received: 09/17/22 08:55

Lab Sample ID: 180-144683-21

Matrix: Water

Method: SW846 EPA 8260C - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		5.0	2.3	ug/L			09/22/22 15:30	5
Chloroform	ND		5.0	3.0	ug/L			09/22/22 15:30	5
Chloroethane	ND		5.0	4.5	ug/L			09/22/22 15:30	5
Methylene Chloride	ND		5.0	4.4	ug/L			09/22/22 15:30	5
Tetrachloroethene	ND		5.0	2.3	ug/L			09/22/22 15:30	5
Trichloroethene	9.7		5.0	3.4	ug/L			09/22/22 15:30	5
Vinyl chloride	ND		5.0	2.0	ug/L			09/22/22 15:30	5
Carbon disulfide	ND		5.0	4.4	ug/L			09/22/22 15:30	5
cis-1,2-Dichloroethene	3.7	J	5.0	3.5	ug/L			09/22/22 15:30	5
Survey mate	9/ D agayamı	Ovalifian	Limita				Dramarad	Analysis	Dil 500

Surrogate	%Recovery	Qualifier	Limits	Prepa	red	Analyzed	Dil Fac	
1,2-Dichloroethane-d4 (Surr)	99		26 - 156		09	/22/22 15:30	5	
4-Bromofluorobenzene (Surr)	87		36 - 124		09	/22/22 15:30	5	
Dibromofluoromethane (Surr)	93		46 - 149		09	/22/22 15:30	5	
Toluene-d8 (Surr)	94		40 - 146		09)/22/22 15:30	5	

Result Qualifier

1,2-Dichloroethane	510 D	50	29 ug/L		09/22/22 20:31	50
Surrogate	%Recovery Quali	fier Limits		Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94	26 - 156			09/22/22 20:31	50
4-Bromofluorobenzene (Surr)	91	36 - 124			09/22/22 20:31	50
Dibromofluoromethane (Surr)	89	46 - 149			09/22/22 20:31	50
Toluene-d8 (Surr)	107	40 - 146			09/22/22 20:31	50

RL

MDL Unit

Prepared

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Analyzed

Dil Fac

Job ID: 180-144683-1

Client: ARCADIS U.S., Inc. Project/Site: Cytec Havre de Grace MD

Client Sample ID: MW8S(091422)

Lab Sample ID: 180-144683-22

Matrix: Water

Date Collected: 09/14/22 10:30 Date Received: 09/17/22 08:55

Method: SW846 EPA 82600	C - Volatile Orga	inic Comp	ounds (GC/N	/IS)					
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	MD		1.0	0.45	ug/L			09/22/22 18:22	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			09/22/22 18:22	1
Chloroform	ND		1.0	0.60	ug/L			09/22/22 18:22	1
Chloroethane	ND		1.0	0.90	ug/L			09/22/22 18:22	1
Methylene Chloride	ND		1.0	0.89	ug/L			09/22/22 18:22	1
Tetrachloroethene	ND		1.0	0.47	ug/L			09/22/22 18:22	1
Trichloroethene	ND		1.0	0.69	ug/L			09/22/22 18:22	1
Vinyl chloride	ND		1.0	0.41	ug/L			09/22/22 18:22	1
Carbon disulfide	ND		1.0	0.88	ug/L			09/22/22 18:22	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			09/22/22 18:22	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		26 - 156					09/22/22 18:22	1
4-Bromofluorobenzene (Surr)	89		36 - 124					09/22/22 18:22	1

Client Sample ID: MW8D(091422) Lab Sample ID: 180-144683-23

46 - 149

40 - 146

97

Date Collected: 09/14/22 10:40

Dibromofluoromethane (Surr)

Toluene-d8 (Surr)

Date Received: 09/17/22 08:55

09/22/22 18:22

09/22/22 18:22

Matrix: Water

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND ND	1.0	0.45	ug/L			09/22/22 18:43	1
1,2-Dichloroethane	ND	1.0	0.57	ug/L			09/22/22 18:43	1
Chloroform	ND	1.0	0.60	ug/L			09/22/22 18:43	1
Chloroethane	ND	1.0	0.90	ug/L			09/22/22 18:43	1
Methylene Chloride	ND	1.0	0.89	ug/L			09/22/22 18:43	1
Tetrachloroethene	ND	1.0	0.47	ug/L			09/22/22 18:43	1
Trichloroethene	ND	1.0	0.69	ug/L			09/22/22 18:43	1
Vinyl chloride	ND	1.0	0.41	ug/L			09/22/22 18:43	1
Carbon disulfide	ND	1.0	0.88	ug/L			09/22/22 18:43	1
cis-1,2-Dichloroethene	ND	1.0	0.71	ug/L			09/22/22 18:43	1

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		26 - 156	-		09/22/22 18:43	1
4-Bromofluorobenzene (Surr)	91		36 - 124			09/22/22 18:43	1
Dibromofluoromethane (Surr)	89		46 - 149			09/22/22 18:43	1
Toluene-d8 (Surr)	103		40 - 146			09/22/22 18:43	1

Client Sample ID: TRIP BLANK

Date Collected: 09/14/22 00:00

Date Received: 09/17/22 08:55

Lab Sample ID: 180-144683-24

Matrix: Water

Mothod: SW846 EDA 8260C - Volatile Organic

Dil Fac
1
1
1
1
1

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Client Sample Results

Client: ARCADIS U.S., Inc. Job ID: 180-144683-1

Project/Site: Cytec Havre de Grace MD

Client Sample ID: TRIP BLANK

Lab Sample ID: 180-144683-24 Date Collected: 09/14/22 00:00

Matrix: Water

09/22/22 19:05

Date Received: 09/17/22 08:55

100

Method: SW846 EPA 82600	C - Volatile Org	anic Comp	oounds (GC/I	VIS) (Coi	ntinued)				
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		1.0	0.47	ug/L			09/22/22 19:05	1
Trichloroethene	ND		1.0	0.69	ug/L			09/22/22 19:05	1
Vinyl chloride	ND		1.0	0.41	ug/L			09/22/22 19:05	1
Carbon disulfide	ND		1.0	0.88	ug/L			09/22/22 19:05	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			09/22/22 19:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		26 - 156					09/22/22 19:05	1
4-Bromofluorobenzene (Surr)	84		36 - 124					09/22/22 19:05	1
Dibromofluoromethane (Surr)	85		46 - 149					09/22/22 19:05	1

Client Sample ID: TRIP BLANK Lab Sample ID: 180-144683-25

40 - 146

Date Collected: 09/14/22 00:00 **Matrix: Water**

Toluene-d8 (Surr)

Analyte	_	Qualifier	ounds (GC/N RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.0	0.45	ug/L		-	09/22/22 19:26	1
1,2-Dichloroethane	ND		1.0	0.57	ug/L			09/22/22 19:26	1
Chloroform	ND		1.0	0.60	ug/L			09/22/22 19:26	1
Chloroethane	ND		1.0	0.90	ug/L			09/22/22 19:26	1
Methylene Chloride	ND		1.0	0.89	ug/L			09/22/22 19:26	1
Tetrachloroethene	ND		1.0	0.47	ug/L			09/22/22 19:26	1
Trichloroethene	ND		1.0	0.69	ug/L			09/22/22 19:26	1
Vinyl chloride	ND		1.0	0.41	ug/L			09/22/22 19:26	1
Carbon disulfide	ND		1.0	0.88	ug/L			09/22/22 19:26	1
cis-1,2-Dichloroethene	ND		1.0	0.71	ug/L			09/22/22 19:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		26 - 156			•		09/22/22 19:26	1
4-Bromofluorobenzene (Surr)	78		36 - 124					09/22/22 19:26	1
Dibromofluoromethane (Surr)	82		46 - 149					09/22/22 19:26	1
Toluene-d8 (Surr)	109		40 - 146					09/22/22 19:26	1

Pace Analytical	CHAIN-	OF-CU	STODY	' Analyti	cal Req	uest Do	cume	nt		LA	B USE (ONLY- Affix W	Cli	ent ID:	AGM-N	MD - Arcadis - M	aryland	d
	Chain-o	of-Custody	-	L DOCUMEN	T - Comple	te all releve	ent fields						SE	G: 22	2091648	III A DI LI DOMINI	110001	11111111
Company: / / /- /-			Billing Ir	formation:								ALL SHA		. Z.L	2031040			
Address:	3.73								_	C	ontaine	r Preservative	PN	1: R	Ne			IIIIIII
7550 Teauve	- Rd.								0			T T C SCI VALIVE				AL DE RIGHT AL MERCHIN	o temmina	0.00.0.00.0
Address: 7550 Teague Report To: Shwetha Shridhas	2011		Email To	tha srie	16 - 000	O.C.	1:0		** Pre	eservative T	ypes: (1)	nitric acid, (2)	sulfuric acid,	(3) hydrocl	nloric acid, (4)	sodium hydroxide, (5) zinc	acetate,	
Copy To:	an		Site Coll	ection Info/	Address:	Pacaca	1213.	eur)				bisulfate, (8) so , (D) TSP, (U) Ur			kane, (A) asco	rbic acid, (B) ammonium su	lfate,	
			State:	County/C	ad	7 7 6-	-1161					Analyses			Lab Profi			
Customer Project Name/Number: 30075892.0	02		MD /	Hartor	d [ime Zone Co] PT[] M		[4] ET	y							ample Receipt Chec dy Seals Present/I		N NA
Phone:	Site/Facility ID	#:			Complian	ice Monitor			3				-		Custo	dy Signatures Pres	ent Y	N NA
Email:					[Yes	[] No			3						Bottle	ctor Signature Pre: es Intact		N NA N NA
Collected By (print): Andy Feild	Purchase Orde Quote #:	!r #:			DW PWS	ID #: tion Code:			0							ct Bottles cient Volume		N NA N NA
Collected By (signatur):	Turnaround Da	ato Poquir	rod:			tely Packed	on Ice:	-	20							es Received on Ice Headspace Acceptal	-	N NA N NA
ala 1		indus			✓ Yes	[] No			X					7	USDA 1	Regulated Soils	Y	N NA
Sample Disposal:	Rush:	, ,	<u>. </u>		-	ered (if appl			2							es in Holding Time ual Chlorine Prese		N NA N NA
K) Dispose as appropriate [] Return	The second secon	me Day			[] Yes	[No	1		~				4	/ 1	C1 St	rips: e pH Acceptable	V	N NA
] Archive:] Hold:	[] 2 Day [(E	xpedite Cha			Analysis:				GAX						pH St:	rips:		
Matrix Codes (Insert in Matrix bo		10	and the second		(GW), Was	tewater (W	/W),		00							de Present Acetate Strips:	Y	N NA
Product (P), Soil/Solid (SL), Oil (OI	L), Wipe (WP), A	Air (AR), Ti	issue (TS),	Bioassay (B)	, Vapor (V)	, Other (OT)		97						LAB U	SE ONLY:		
Customer Sample ID	Matrix *	Comp / Grab	Comp	ected (or osite Start)		osite End	Res Cl	# of Ctns	AM						Lab S	ample # / Comments		
4 40()	0.1		9/15		Date	Time		3	-	-	-				-			-
MW18 (091522)-24	GW	G	1.7	6810			+	_	3	-	-				+			
MW18(091522)-31	GW	G	9/15		1			3	3	- 10				-	-			7
MW 27 (091522)	GW	6	9/15		+		-	3	3	_	-				-		-	1
MW14I(091522)	64	6	9/15				+	3	3	- 4			_		-			-
MW 23 (091522)40		G	9/15)			3	3		-							-
MW 23 (091522)-47	GW	6	1 1//	0910				3	3						1			
MW19D1(091522)	GW	G		50930				3										
MWZDDI(091522)	GW	G	9/15		1			3	3						0			8
MW3 (091522)	GW	G	9/15					3										V
MW16 (091522)	640	G	9/15					3	3									10
Customer Remarks / Special Condit			Type of	Ice Used:	Wet	Blue D	ry N	one		SHORT H	OLDS PI	RESENT (<72 I	nours): Y	N N/	'A	Lab Sample Temperat		
DUPOZ (091522) 0	at 1201	0 11	Packing	Material Use	ed:	1	60	3/	8	Lab Track	king #:	28	1258	31		Temp Blank Receiv Therm ID#:		_
	0		0//		90		00	/0		Samples	received					Cooler 1 Temp Upo Cooler 1 Therm Co		
			Radchei	m sample(s)	screened (<	<500 cpm):	Y	NA NA		FEDE		PS Client	Courie	Pace	Courier	Cooler 1 Corrected	Temp:	oC
Relinquished by/Company: (Signalu	ire)	Dat	te/Time:	221450		by/Compan	y: (Signat	ture)		Date	/Time:		MT. Table #:	IL LAB USE	ONLY	Comments:	1.5	~
	17	10/1	1	the same of the sa				COLUMN TO A	1		In a	14.6	Acctnum:					
Relinquished by/Company: (Signatu	ure)	Dat	te/Time:	/22	Received	by/Compan	y: (Signal	ture	Est.	i Date	Time:	120	Template: Prelogin:			Trip Blank Received HCL MeOH		N NA Other
Relinquished by/Company: (Signatu	ure)	Dat	te/Time:		Received I	by/Compan	y: (Signat	ture)		Date	/Time:		PM:			Non Conformance(s)	; Page	·



Project ID: Cytec 30075892.02

Sample Results

Report Date: 09/27/2022

AM20GAX

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
NA	NA	NA	1	09/16/22 12:21	749912	LMB	NA
CAS#	Parameter		Result	DL	LOQ		Units
74-84-0	Ethane		0.17U	0.17	1.0		ug/L
74-85-1	Ethene		0.24U	0.24	1.0		ug/L
74-82-8	Methane		2.0U	2.0	5.0		ug/L

M/M/49/004522\ 24	Collect Date	09/15/2022 08:22	Lab ID	22209164802
MW18(091522)-31	Receive Date	09/16/2022 09:19	Matrix	Water

AM20GAX

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
NA	NA	NA	1	09/16/22 12:33	749912	LMB	NA
CAS#	Parameter		Result	DL	LOQ		Units
74-84-0	Ethane		0.17U	0.17	1.0		ug/L
74-85-1	Ethene		0.24U	0.24	1.0		ug/L
74-82-8	Methane		4.9J	2.0	5.0		ug/L

M/M/27/004522)	Collect Date	09/15/2022 07:45	Lab ID	22209164803	
MW27(091522)	Receive Date	09/16/2022 09:19	Matrix	Water	

AM20GAX

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
NA	NA	NA	1	09/16/22 12:44	749912	LMB	NA
CAS#	Parameter		Result	DL	LOQ		Units
74-84-0	Ethane		0.85J	0.17	1.0		ug/L
74-85-1	Ethene		730	0.24	1.0		ug/L
74-82-8	Methane		78	2.0	5.0		ug/L

MW44I(004522)	Collect Date	09/15/2022 08:30	Lab ID	22209164804
MW14I(091522)	Receive Date	09/16/2022 09:19	Matrix	Water

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
NA	NA	NA	1	09/16/22 12:55	749912	LMB	NA
CAS#	Parameter		Result	DL	LOQ		Units
74-84-0	Ethane		0.68J	0.17	1.0		ug/L
74-85-1	Ethene		0.42J	0.24	1.0		ug/L



Project ID: Cytec 30075892.02 **Report Date:** 09/27/2022

Sample Results

AM20GAX (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
NA	NA	NA	1	09/16/22 12:55	749912	LMB	NA
CAS# 74-82-8	Parameter Methane		Result 100	DL 2.0	LOQ 5.0		Units ug/L

MM/22/004522) 40	Collect Date	09/15/2022 09:00	Lab ID	22209164805
MW23(091522)-40	Receive Date	09/16/2022 09:19	Matrix	Water

AM20GAX

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
NA	NA	NA	1	09/16/22 13:06	749912	LMB	NA
CAS#	Parameter		Result	DL	LOQ		Units
74-84-0	Ethane		0.59J	0.17	1.0		ug/L
74-85-1	Ethene		0.30J	0.24	1.0		ug/L
74-82-8	Methane		11	2.0	5.0		ug/L

MW23(091522)-47	Collect Date	09/15/2022 09:10	Lab ID	22209164806
WW23(091522)-47	Receive Date	09/16/2022 09:19	Matrix	Water

AM20GAX

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
NA	NA	NA	1	09/16/22 13:18	749912	LMB	NA
CAS#	Parameter		Result	DL	LOQ		Units
74-84-0	Ethane		1.0	0.17	1.0		ug/L
74-85-1	Ethene		0.24U	0.24	1.0		ug/L
74-82-8	Methane		15	2.0	5.0		ug/L

MW19D1(091522)	Collect Date	09/15/2022 09:30	Lab ID	22209164807
WW 19D1(091522)	Receive Date	09/16/2022 09:19	Matrix	Water

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
NA	NA	NA	1	09/16/22 13:29	749912	LMB	NA
CAS#	Parameter		Result	DL	LOQ		Units
74-84-0	Ethane		3.8	0.17	1.0		ug/L
74-85-1	Ethene		0.24U	0.24	1.0		ug/L



Project ID: Cytec 30075892.02 **Report Date:** 09/27/2022

Sample Results

AM20GAX (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
NA	NA	NA	1	09/16/22 13:29	749912	LMB	NA
CAS# 74-82-8	Parameter Methane		Result	DL 2.0	LOQ 5.0		Units ug/L

MW20D4(004522)	Collect Date	09/15/2022 09:50	Lab ID	22209164808
MW20D1(091522)	Receive Date	09/16/2022 09:19	Matrix	Water

AM20GAX

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
NA	NA	NA	1	09/16/22 13:40	749912	LMB	NA
CAS#	Parameter		Result	DL	LOQ		Units
74-84-0	Ethane		0.17U	0.17	1.0		ug/L
74-85-1	Ethene		0.24U	0.24	1.0		ug/L
74-82-8	Methane		180	2.0	5.0		ug/L

M/M/2/004522)	Collect Date	09/15/2022 10:45	Lab ID	22209164809
MW3(091522)	Receive Date	09/16/2022 09:19	Matrix	Water

AM20GAX

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
NA	NA	NA	1	09/16/22 13:51	749912	LMB	NA
CAS#	Parameter		Result	DL	LOQ		Units
74-84-0	Ethane		0.93J	0.17	1.0		ug/L
74-85-1	Ethene		10	0.24	1.0		ug/L
74-82-8	Methane		14	2.0	5.0		ug/L

MANA C (004 F22)	Collect Date	09/15/2022 12:00	Lab ID	22209164810
MW16(091522)	Receive Date	09/16/2022 09:19	Matrix	Water

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
NA	NA	NA	1	09/16/22 14:03	749912	LMB	NA
CAS#	Parameter		Result	DL	LOQ		Units
74-84-0	Ethane		8.1	0.17	1.0		ug/L
74-85-1	Ethene		0.60J	0.24	1.0		ug/L



Project ID: Cytec 30075892.02 **Report Date:** 09/27/2022

Sample Results

AM20GAX (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
NA	NA	NA	1	09/16/22 14:03	749912	LMB	NA
CAS# 74-82-8	Parameter Methane		Result 57	DL 2.0	LOQ 5.0		Units ug/L

DUD02/004522\	Collect Date	09/15/2022 12:00	Lab ID	22209164811
DUP02(091522)	Receive Date	09/16/2022 09:19	Matrix	Water

AM20GAX

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
NA	NA	NA	1	09/16/22 14:14	749912	LMB	NA
CAS#	Parameter		Result	DL	LOQ		Units
74-84-0	Ethane		1.0	0.17	1.0		ug/L
74-85-1	Ethene		11	0.24	1.0		ug/L
74-82-8	Methane		18	2.0	5.0		ug/L

EB/001522\	Collect Date	09/15/2022 00:01	Lab ID	22209164812	
FB(091522)	Receive Date	09/16/2022 09:19	Matrix	Water	

Prep Date	Prep Batch	Prep Method	Dilution	Run Date	Run Batch	Analyst	%Moisture
NA	NA	NA	1	09/16/22 14:25	749912	LMB	NA
CAS#	Parameter		Result	DL	LOQ		Units
74-84-0	Ethane		0.17U	0.17	1.0		ug/L
74-85-1	Ethene		0.24U	0.24	1.0		ug/L
74-82-8	Methane		2.0U	2.0	5.0		ug/L

Appendix F

Groundwater Stabilization System Details



Ex	ktraction Well ID:		MW-1	10D (28 to 3	0 feet bgs)					EW-1 (40 to	45 feet bgs)					EW-2 (24 to	o 32 feet bgs)					
				1 2-	-DCA		MC	Total		12	-DCA		MC	Total		12	-DCA		MC	Total Extracted	Total Mass of 1,2-DCA	Total Mass of MC
	Date ¹	Total Extracted Volume	Average Flow _ Rate	Result ²	Mass Removed	Result ²	Mass Removed	Extracted Volume	Average Flow Rate	Result ²	Mass Removed	Result ²	Mass Removed	Extracted Volume	Average Flow Rate	Result ²	Mass Removed	Result ²	Mass Removed	Volume	Removed	Removed
		gallons	gpm	μg/L	lbs	μg/L	lbs	gallons	gpm	μg/L	lbs	μg/L	Ibs	gallons	gpm	μg/L	lbs	μg/L	lbs	gallons	lbs	lbs
1st	1/1/2015	0	3.06	2	0.000	0	0	0	1.01	1,900	0.00	33	0.000	0	0.15	79,000	0.00	260,000	0.00	0	0.00	0.00
Quarter	2/1/2015	136,727	5.47	2	0.002	0	0	45,307	0.43	1,900	0.72	33	0.012	6,660	0.25	79,000	4.38	260,000	14.43	188,694	5.10	14.44
2015	3/1/2015	357,230	5.78	2	0.006	0	0	62,740	2.01	1,900	0.99	33	0.017	16,722	0.25	79,000	11.01	260,000	36.23	436,692	12.01	36.25
2nd Quarter	4/3/2015 5/1/2015	615,335 851,672	5.47 5.97	160 160	0.344	14 14	0.030 0.028	152,549 230,645	1.81	2,100 2,100	1.57 1.37	270 270	0.202 0.176	27,747 38,277	0.24	51,000 51,000	4.69 4.48	110,000 110,000	10.11 9.65	795,631 1,120,594	6.60 6.16	10.34 9.86
2015	6/1/2015	1,117,996	5.93	160	0.36	14	0.023	318,850	1.81	2,100	1.54	270	0.178	50,802	0.27	51,000	5.32	110,000	11.48	1,487,648	7.22	11.71
3rd	7/1/2015	1,374,034	6.99	110	0.23	0	0	397,010	1.98	1,800	1.17	0	0	62,432	0.29	150,000	14.54	370,000	35.86	1,833,476	15.94	35.86
Quarter	8/1/2015	1,685,951	6.41	110	0.29	0	0	485,408	1.86	1,800	1.33	0	0	75,481	0.60	150,000	16.31	370,000	40.24	2,246,840	17.92	40.24
2015 4th	9/1/2015 10/1/2015	1,971,907 2,186,543	4.97 5.75	110 38	0.26 0.07	0 0	0	568,608 645,776	1.79 1.72	1,800 1,400	1.25 0.90	0 31	0.020	102,197 120,082	0.41	150,000 43,000	33.40 6.41	370,000 82,000	82.38 12.22	2,642,712 2,952,401	34.91 7.38	82.38 12.24
Quarter	11/1/2015	2,443,223	1.55	38	0.07	0	0	722,532	0.50	1,400	0.90	31	0.020	134,568	0.32	43,000	5.19	82,000	9.90	3,300,323	6.17	9.92
2015	12/1/2015	2,510,237	7.01	38	0.02	0	0	744,186	1.99	1,400	0.25	31	0.006	141,946	0.62	43,000	2.64	82,000	5.04	3,396,369	2.92	5.05
1st	1/1/2016	2,823,134	6.99	58	0.15	1.1	0.003	833,039	1.99	1,700	1.26	65	0.048	169,450	1.09	29,000	6.65	59,000	13.52	3,825,623	8.06	13.57
Quarter	2/1/2016	3,135,138	6.63	58	0.15	1.1	0.003	921,659	1.88	1,700	1.26	65	0.048	218,030	1.00	29,000	11.74	59,000	23.89	4,274,827	13.15	23.94
2016 2nd	3/1/2016 4/1/2016	3,412,113 3,693,336	6.30 6.98	58 19	0.13 0.04	1.1 0	0.003	1,000,317 1,080,173	1.79 1.98	1,700 1,800	1.11	65 29	0.043 0.019	259,958 288,625	0.64	29,000 21,000	10.13 5.02	59,000 39,000	20.61 9.32	4,672,388 5,062,134	11.38 6.26	20.66 9.34
Quarter	5/1/2016	3,994,872	7.00	19	0.04	0	0	1,080,173	1.98	1,800	1.20	29	0.019	307,201	0.43	21,000	3.25	39,000	6.04	5,062,134	4.58	6.06
2016	6/1/2016	4,307,169	6.83	19	0.05	0	0	1,254,252	1.95	1,800	1.33	29	0.021	324,347	0.34	21,000	3.00	39,000	5.57	5,885,768	4.38	5.59
3rd	7/1/2016	4,602,440	3.75	12	0.03	0	0	1,338,669	1.05	1,700	1.20	49	0.034	339,027	0.23	19,000	2.32	25,000	3.06	6,280,136	3.55	3.09
Quarter	8/1/2016	4,769,782	6.33	12	0.02	0	0	1,385,380	1.81	1,700	0.66	49	0.019	349,219	0.21	19,000	1.61	25,000	2.12	6,504,381	2.29	2.14
2016 4th	9/1/2016 10/1/2016	5,052,501 5,301,578	5.77 6.89	12 62	0.03 0.13	0 0	0	1,465,979 1,535,780	1.62 1.84	1,700 1,400	1.14 0.81	49 0	0.033	358,606 364,962	0.15 0.21	19,000 33,000	1.49 1.75	25,000 76,000	1.96 4.03	6,877,086 7,202,320	2.66 2.69	1.99 4.03
Quarter	11/1/2016	5,608,954	5.82	62	0.13	0	0	1,617,770	1.36	1,400	0.96	0	0	374,551	0.21	33,000	2.64	76,000	6.07	7,202,320	3.75	6.07
2016	12/1/2016	5,860,409	2.39	62	0.13	0	0	1,676,316	0.57	1,400	0.68	0	0	380,827	0.04	33,000	1.73	76,000	3.97	7,917,552	2.54	3.97
1st	1/1/2017	5,967,051	4.69	23	0.02	0	0	1,701,943	1.05	1,600	0.34	0	0	382,746	0.59	29,000	0.46	55,000	0.88	8,051,740	0.83	0.88
Quarter	2/1/2017	6,176,352	6.34	23	0.04	0	0	1,749,033	1.35	1,600	0.63	0	0	408,971	1.67	29,000	6.34	55,000	12.02	8,334,356	7.01	12.02
2017	3/1/2017	6,431,784	6.85	23	0.05	0	0	1,803,562	1.94	1,600	0.73	0	0	476,412	1.95	29,000	16.30	55,000	30.91	8,711,758	17.07	30.91
2nd Quarter	4/1/2017 5/1/2017	6,737,487 7,039,278	6.99 5.52	8.9 8.9	0.02	0 0	0	1,890,014 1,975,277	1.97 1.41	1,300 1,300	0.94 0.92	0	0	563,333 639,629	1.77 0.15	13,000 13,000	9.42 8.27	22,000 22,000	15.94 13.99	9,190,834 9,654,184	10.38 9.21	15.94 13.99
2017	6/1/2017	7,285,728	5.75	8.9	0.02	0	0	2,038,361	1.38	1,300	0.68	0	0	646,309	0.00	13,000	0.72	22,000	1.22	9,970,398	1.43	1.22
3rd	7/1/2017	7,534,069	2.66	43	0.09	0	0	2,098,189	0.64	1,500	0.75	0	0	646,310	0.00	NS	0.00	NS	0.00	10,278,568	0.84	0.00
Quarter	8/1/2017	7,652,980	6.31	43	0.04	0	0	2,126,815	1.52	1,500	0.36	0	0	646,310	0.00	NS	0.00	NS	0.00	10,426,105	0.40	0.00
2017 4th	9/1/2017 10/1/2017	7,934,505 8,174,670	5.56 6.13	3.6	0.10	0	0	2,194,635 2,252,530	1.34 1.86	1,500 1,100	0.85 0.53	0 19	0.009	646,310 660,009	0.32 2.75	NS 43,000	0.00 4.91	NS 110,000	0.00 12.56	10,775,450 11,087,209	0.95 5.45	0.00 12.57
Quarter	11/1/2017	8,448,409	6.93	3.6	0.01	0	0	2,335,372	1.90	1,100	0.76	19	0.003	782,905	1.24	43,000	44.04	110,000	112.66	11,566,686	44.81	112.67
2017	12/1/2017	8,747,857	6.73	3.6	0.01	0	0	2,417,470	1.79	1,100	0.75	19	0.013	836,553	1.31	43,000	19.22	110,000	49.18	12,001,880	19.99	49.19
1st	1/1/2018	9,048,175	5.07	11	0.03	0	0	2,497,585	0.62	1,600	1.07	78	0	895,254	0.97	15,000	7.34	23,000	11.25	12,441,014	8.43	11.30
Quarter	2/1/2018	9,274,446	5.41	11	0.02	0	0	2,525,387	0.46	1,600	0.37	78	0	938,695	1.08	15,000	5.43	23,000	8.33	12,738,528	5.82	8.34
2018 ³ 2nd	3/1/2018 4/1/2018	9,492,572 9,741,020	5.57 6.22	11 11	0.02	0	0	2,544,050 2,544,980	0.02	1,600	0.25	78 78	0	982,090 1,018,959	0.83	15,000 15,000	5.42 4.61	23,000 23,000	8.32 7.07	13,018,712 13,304,959	5.69 4.64	8.33 7.07
Quarter	5/1/2018	10,009,819	4.61	11	0.02	0	0	2,544,999	0.00	1,600	0.0003	78	0	1,046,910	0.03	15,000	3.49	23,000	5.36	13,601,728	3.52	5.36
2018	6/1/2018	10,215,723	2.32	11	0.02	0	0	2,548,980	0.07	1,600	0.05	78	0	1,081,069	0.62	15,000	4.27	23,000	6.55	13,845,772	4.34	6.55
3rd	7/1/2018	10,316,112	1.86	11	0.01	0	0	2,552,115	0.21	1,600	0.04	78	0	1,107,848	0.01	15,000	3.35	23,000	5.13	13,976,075	3.40	5.13
Quarter 2018	8/1/2018	10,399,332	3.12	11	0.01	0	0	2,561,534	0.00	1,600	0.13	78	0	1,108,423	0.48	15,000	0.07	23,000	0.11	14,069,289	0.21	0.12
4th	9/1/2018 10/1/2018	10,538,569 10,626,996	2.05 3.82	5.7	0.01	0 0	0	2,561,534 2,561,534	0.00 1.30	1,600 580	0	78 0	0	1,130,059 1,145,179	0.35 0.62	15,000 18,000	2.70 2.27	23,000 49,000	4.15 6.17	14,230,162 14,333,709	2.72	4.15 6.17
Quarter	11/1/2018	10,797,508	3.85	5.7	0.004	0	0	2,619,587	1.92	580	0.28	0	0	1,172,722	0.57	18,000	4.13	49,000	11.25	14,589,817	4.42	11.25
2018 ³	12/1/2018	10,964,039	4.05	5.7	0.01	0	0	2,702,501	1.77	580	0.40	0	0	1,197,557	0.39	18,000	3.73	49,000	10.14	14,864,097	4.13	10.14
1st	1/1/2019	11,144,776	2.74	1.5	0.002	0	0	2,781,647	1.26	940	0.62	0	0	1,214,818	0.31	12,000	1.73	22,000	3.16	15,141,241	2.35	3.16
Quarter	2/1/2019	11,267,066	3.78	1.5	0.002	0	0	2,838,080	1.69	940	0.44	0	0	1,228,647	0.52	12,000	1.38	22,000	2.54	15,333,793	1.83	2.54
2019 2nd	3/1/2019 4/1/2019	11,419,645 11,466,144	1.04 7.86	1.5 1.4	0.002 0.001	0 0	0	2,906,339 2,965,250	1.32 2.00	940 900	0.53 0.44	0	0	1,249,766 1,269,291	0.44	12,000 13,000	2.11	22,000 12,000	3.87 1.95	15,575,750 15,700,685	2.65 2.56	3.87 1.95
Quarter	5/1/2019	11,805,830	6.66	1.4	0.004	0	0	3,051,577	1.48	900	0.44	0	0	1,288,354	0.44	13,000	2.12	12,000	1.91	16,145,761	2.72	1.91
2019	6/1/2019	12,103,165	5.57	1.4	0.003	0	0	3,117,483	1.27	900	0.49	0	0	1,297,948	0.15	13,000	1.04	12,000	0.96	16,518,596	1.54	0.96
3rd	7/1/2019	12,343,821	6.95	0	0.000	0	0	3,172,189	1.58	910	0.41	0	0	1,304,275	0.18	21,000	1.11	38,000	2.00	16,820,285	1.52	2.00
Quarter	8/1/2019	12,654,193	5.78	0.0	0.000	0	0	3,242,576	1.12	910	0.53	0	0	1,312,110	1.82	21,000	1.37	38,000	2.48	17,208,879	1.90	2.48
2019 4th	9/1/2019 10/1/2019	12,912,347 13,188,603	6.39 6.28	1.2 1.9	0.003 0.004	0	0	3,292,427 3,333,455	0.95 0.93	910 540	0.38 0.18	0	0	1,393,214 1,500,098	2.47	21,000 21,000	14.19 18.70	38,000 38,000	25.68 33.85	17,597,988 18,022,156	14.57 18.89	25.68 33.85
Quarter	11/1/2019	13,469,069	7.86	1.9	0.004	0	0	3,375,192	1.17	540	0.18	0	0	1,595,726	2.14	21,000	16.74	38,000	30.28	18,439,987	16.93	30.28
2019	12/1/2019	13,808,795	2.73	1.9	0.01	0	0	3,425,741	0.45	540	0.23	0	0	1,686,656	0.96	21,000	15.91	38,000	28.79	18,921,192	16.15	28.79

Appendix F GW Stabilization System Details



Ext	raction Well ID:		MW-	10D (28 to 30	0 feet bgs)					EW-1 (40 to	45 feet bgs)					EW-2 (24 to	32 feet bgs)			Total	Total Mass of	Total Mass of
		Total Extracted	Average Flow	1,2-	DCA		ИС	Total	Average	1,2	-DCA	ı	мс	Total	Average	1,2	-DCA	N	IC	Extracted	1,2-DCA	MC
1	Date ¹	Volume	Rate	Result ²	Mass Removed	Result ²	Mass Removed	Extracted Volume	Flow Rate	Result ²	Mass Removed	Result ²	Mass Removed	Extracted Volume	Flow Rate	Result ²	Mass Removed	Result ²	Mass Removed	Volume	Removed	Removed
		gallons	gpm	μg/L	lbs	μg/L	lbs	gallons	gpm	μg/L	lbs	μg/L	lbs	gallons	gpm	μg/L	lbs	μg/L	lbs	gallons	lbs	lbs
1st	1/1/2020	13,930,446	6.02	6.6	0.007	0	0	3,445,778	0.90	790	0.13	0	0	1,729,535	2.32	19,000	6.79	34,000	12.15	19,105,759	6.93	12.15
Quarter	2/1/2020	14,199,192	6.43	6.6	0.01	0	0	3,485,899	1.01	790	0.26	0	0	1,832,945	2.49	19,000	16.37	34,000	29.30	19,518,036	16.65	29.30
2020	3/1/2020	14,467,584	6.50	6.6	0.01	0	0	3,528,124	0.88	790	0.28	0	0	1,936,882	3.96	19,000	16.46	34,000	29.45	19,932,590	16.75	29.45
2nd	4/1/2020	14,757,940	5.44	3.7	0.01	0	0	3,567,497	0.83	270	0.09	0	0	2,113,602	3.14	4,900	7.22	3,000	4.42	20,439,039	7.31	4.42
Quarter	5/1/2020	14,993,041	7.52	3.7	0.01	0	0	3,603,281	1.18	270	0.08	0	0	2,249,331	3.61	4,900	5.54	3,000	3.39	20,845,653	5.63	3.39
2020	6/1/2020	15,328,622	7.13	3.7	0.01	0	0	3,655,924	1.06	270	0.12	0	0	2,410,444	1.74	4,900	6.58	3,000	4.03	21,394,990	6.71	4.03
3rd	7/1/2020	15,636,607	5.86	4.6	0.01	0	0	3,701,753	0.88	550	0.21	0	0	2,485,722	0.67					21,824,082	0.22	0.00
Quarter	8/1/2020	15,898,145	3.49	4.6	0.01	0	0	3,740,899	0.65	550	0.18	0	0	2,515,510	2.27					22,154,554	0.19	0.00
2020	9/1/2020	16,054,155	3.86	4.6	0.01	0	0	3,769,762	0.72	500	0.12	0	0	2,616,679	1.44					22,440,596	0.13	0.00
4th	10/1/2020	16,220,783	6.25	3.5	0.005	0	0	3,800,771	1.14	240	0.06	0	0	2,678,846	0.52	2,900	1.50	710	0.37	22,700,400	1.57	0.37
Quarter	11/1/2020	16,499,657	5.87	3.5	0.008	0	0	3,851,779	1.06	240	0.10	0	0	2,702,011	1.55	2,900	0.56	710	0.14	23,053,447	0.67	0.14
2020	12/1/2020	16,753,269	4.45	3.5	0.007	0	0	3,897,720	0.81	240	0.09	0	0	2,769,074	1.42	2,900	1.62	710	0.40	23,420,063	1.72	0.40
1st	1/1/2021	16,951,756	6.46	2.4	0.004	0	0	3,934,054	1.18	820	0.25	0	0	2,832,342	0.82	9,000	4.75	13,000	6.85	23,718,152	5.00	6.85
Quarter	2/1/2021	17,239,930	3.18	2.4	0.01	0	0	3,986,730	0.54	820	0.36	0	0	2,868,965	0.90	9,000	2.75	13,000	3.97	24,095,625	3.11	3.97
2021	3/1/2021	17,372,603	5.10	2.4	0.00	0	0	4,009,277	0.86	820	0.15	0	0	2,906,484	1.39	9,000	2.81	13,000	4.06	24,288,364	2.97	4.06
2nd	4/1/2021	17,600,157	6.44	83	0.16	110	0	4,047,549	1.07	1,100	0.35	500	0	2,968,418	1.67	17,000	8.77	10,000	5.16	24,616,124	9.28	5.53
Quarter 2021	5/1/2021	17,878,323	6.55	83	0.19	110	0	4,093,768	1.12	1,100	0.42	500	0	3,040,676	1.48	17,000	10.24	10,000	6.02	25,012,767	10.85	6.47
	6/1/2021	18,170,555	3.73	83	0.20	110	0	4,143,873	0.63	1,100	0.46	500	0	3,106,950	1.27	17,000	9.39	10,000	5.52	25,421,378	10.05	6.00
3rd	7/1/2021	18,331,696	1.43	1.0	0.00	0	0	4,171,167	0.27	130	0.03	0	0	3,161,794	0.52	1,800	0.82	3,200	1.46	25,664,657	0.85	1.46
Quarter 2021	8/1/2021	18,395,419	2.99	1.0	0.00	0	0	4,183,051	0.56	130	0.01	0	0	3,184,818	1.16	1,800	0.35	3,200	0.61	25,763,288	0.36	0.61
	9/1/2021	18,528,778	5.02	1.0	0.00	0	0	4,208,262	0.95	130	0.03	0	0	3,236,498	0.92	1,800	0.78	3,200	1.38	25,973,538	0.80	1.38
4th	10/1/2021	18,745,511	5.19	290	0.524	59	0	4,249,341	0.98	380	0.13	9.8	0	3,276,186	0.01	4,700	1.55	17,000	5.62	26,271,038	2.21	5.73
Quarter 2021	11/1/2021	18,977,098	4.65	290	0.560	59	0	4,293,182	0.88	380	0.14	9.8	0	3,276,618	0.82	4,700	0.02	17,000	0.06	26,546,898	0.72	0.18
	12/1/2021	19,177,847	4.92	290	0.485	59	0	4,331,232	0.93	380	0.12	10	0	3,311,987	0.41	4,700	1.39	17,000	5.01	26,821,066	1.99	5.11
1st Quarter	1/1/2022 2/1/2022	19,232,448 19,267,250	0.78 2.14	2.1 2.1	0.001	0	0	4,339,747 4,344,997	0.12 0.41	350 350	0.02	56 56	0	3,331,637 3,346,987	0.34	47,000 47,000	7.70 6.01	140,000 140,000	22.93 17.91	26,903,832 26,959,234	7.72 6.03	22.93 17.91
2022	3/1/2022	19,356,806	4.91	2.1	0.00	0	0			350		56	0	3,382,883				· · · · ·			14.11	41.89
	4/1/2022	19,575,921	4.80	0	0.00	0	0	4,361,978 4,403,539	0.93	670	0.05 0.23	0	0	3,407,871	0.56	47,000	14.06	140,000	41.88	27,101,667 27,387,331	0.23	0.00
2nd Quarter	5/1/2022	19,575,921	5.23	0	0.00	0	0	4,442,928	0.99	670		0	0	3,407,871	0.01					27,634,522	0.23	0.00
2022	6/1/2022	20,017,019	5.45	0	0.00	0	0	4,442,928	1.03	670	0.22	0	0	3,408,166	0.00					27,034,522	0.25	0.00
			2.75	0.73		0	0			790		0	0									0.00
3rd Quarter	7/1/2022 8/1/2022	20,252,606	5.00	0.73	0.00	0	0	4,531,884 4,555,179	0.52 0.95	790 790	0.29 0.15	0	0	3,408,166 3,408,198	0.00					28,192,656 28,338,711	0.29 0.15	0.00
2022	9/1/2022	20,375,334 20,598,606	6.22	0.73	0.00	0	0	4,555,179	1.18	790	0.15	0	0	3,408,198	0.00					28,604,404	0.15	0.00
4th	10/1/2022	20,598,606	6.22	0.73 1.8	0.00	0	0	4,597,600	1.18	790 400	0.28	0	0	3,408,198	0.00		-			28,604,404	0.28	0.00
Quarter	11/1/2022		5.40	1.8	0.004	0	0	4,648,734		400		0	0	3,408,198	0.00					29,257,379	0.17	0.00
2022		21,135,521				-		, -,	0.70		0.22	-	-	-,,							-	
2022	12/1/2022	21,368,910	4.16 5.36	1.8	0.004 1.98	0	0 00	4,743,990	0.79	400	0.10	0	0.65	3,408,198	0.00		108		268	29,521,098	0.10 122	0.00
	2015: 2016:	2,823,134 3,143,917	5.36 5.97		1.98		0.09 0.01	833,039 868,904	1.57 1.65		11.99 12.89		0.65 0.29	169,450 213,296	0.32 0.41		51		208 100	3,825,623 4,226,117	65	268 100
	2017:	3,081,124	5.87		0.43		0.00	795,642	1.51		8.24		0.04	512,508	0.98		110		249	4,389,274	118	249
	2018:	2,096,601	4.00		0.18		0.00	284,062	0.54		2.60		0.09	319,564	0.61		47		84	2,700,227	50	84
	2019:	2,785,670	5.31		0.03		0.00	664,131	1.27		5.11		0.00	514,717	0.98		78.47		137.48	3,964,518	84	137
	2020:	3,021,310	5.73		0.11		0.00	488,276	0.93		1.73		0.00	1,102,807	2.09		62.64		83.64	4,612,393	64	84
	2021:	2,280,692	4.64		2.14		1.05	405,693	0.83		2.46		0.57	499,295	0.95		43.61		45.74	3,185,680	48	47
	2022:	/- /	4.41		0.02		0.00	439,505	0.83		2.00		0.01	76,561	0.15		27.77		82.71	2,838,180	30	83
Cı	umulative Total⁴:	21,554,562	495.40		5.96		1.15	4,779,252	109.65		47.01		1.65	3,408,198	77.82		528.66		1050.44	29,742,012	582	1053

Notes:

Data collected within the month corresponding to its row are bolded. Results are extrapolated for the entire quarter. Nondetects are presented as zeros.

Acronyms and Abbreviations:

-- = not applicable gpm = gallon per minute μg/L = microgram per liter

lb = pound 1,2-DCA = 1,2-dichloroethane MC = methylene chloride

bgs = below ground surface NS = not sampled

2/2 Appendix F GW Stabilization System Details

¹ Totalizer readings are collected at 8:00AM.

Analytical data were collected quarterly at each extraction well beginning in second quarter 2015.
 1,2-DCA and MC results presented for first quarter 2015 were collected on December 30, 2014.

³ Analytical data were collected semiannually in 2018.

Appendix G

Historical Analytical Data



	Location I		MW-1A	MW-1A	MW-1A	MW-1A	MW-1A	MW-1A	MW-2	MW-2	MW-2	MW-2	MW-2	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3
		07/16/92	11/01/94	10/23/97	02/26/98	07/22/98	12/16/98	04/14/99	07/16/92	11/01/94	02/25/98	12/16/98	04/14/99	07/16/92	11/01/94	10/23/97	02/26/98	03/16/98	07/22/98	12/16/98	04/14/99	11/15/01	12/19/01	05/28/02	09/16/02	12/18/02
Volatile Organics	CAO Goal ¹ Units		00.11	40.11	40.11	0.011	0.011	0.05.11		10.11	40.11	0.011	0.05.11	210	0.00011	450.000	7.01		400.11	40011	05.11	40.11	00.11		5011	00.11
1,1,2-Trichloroethane	5 ug/L	NA Ess	20 U	10 U	10 U	2.0 U	2.0 U	0.35 U	NA 100	10.0	10 U	2.0 U	0.35 U	NA	2,000 U	150,000	7.0 J	86	400 U	100 U	35 U	40 U	20 U	90	56 U	28 U
1,2-Dichloroethane Chloroethane	5 ug/L	560 NA	250 20 U	190 D NA	99 NA	NA	NA	110 NA	420 NA	10 U	18 NA	NA NA	NA NA	36,000 NA	36,000 2.000 U	44,000,000 D	870 D NA	2,800 E NA	24,000 NA	16,000 D NA	20,000 D NA	22,000 NA	19,000 NA	22,000 NA	15,000 NA	16,000 48 U
Chloroform	0.19 ug/L	NA NA	20 U	10 U	10 U	2.0 U	2.0 U	0.59 U	NA NA	10 U	10 U	2.0 U	0.59 U	NA NA	2,000 U	38 000	20 I	NA 21	400 U	100 U	59 U	38 U	19 U	50 U	50 U	25 U
Methylene Chloride	5 ug/L	12 B	10 JB	10.000 U	10 U	5.0 U	5.0 U	1.1 U	1.800 B	10 U	10 U	5.0 U	1.1 U	2.000 B	2.000 U	15.000	9.0 J	43	1.600	250 U	110 U	200 U	100 U	180 U	180 U	88 U
Tetrachloroethene	5 ug/L	NA.	20 U	10.000 U	10 U	2.0 U	2.0 U	0.62 U	NA NA	10 U	10 U	2.0 U	0.62 U	NA NA	2,000 U	6.000 J	10 U	6.0	400 U	100 U	62 U	56 U	28 U	48 U	48 U	24 U
Trichloroethene	5 ug/L	NA	20 U	10.000 U	10 U	2.0 U	2.0 U	0.44 U	NA	10 U	10 U	2.0 U	0.44 U	NA	380 J	5.000.000 U	220 D	440 E	450 U	240	410	770	720	780	460	500
cis-1,2-Dichloroethene	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	64
Vinyl Chloride	2 ug/L	0.13 U	20 U	10,000 U	10 U	2.0 U	2.0 U	0.71 U	4.8	10 U	10 U	2.0 U	0.71 U	15	2,000 U	200,000	12	140	400 U	260	71 U	46 U	23 U	58 U	58 U	29 U
Carbon Disulfide	1000 ug/L	NA	20 U	10 U	10 U	2.0 U	2.0 U	0.56 U	NA	4.0 J	10 U	2.0 U	0.56 U	NA	2,000 U	10,000 U	10 U	2.0 U	400 U	100 U	56 U	50 U	25 U	60 U	60 U	30 U
										T						T				1 1			T			
	Location I		MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3°	MW-3	MW-3D	MW-3D-DL	MW-3DL	MW-3-DL	MW-4
	Sample Dat	03/05/03	10/09/03	03/18/04	10/11/04	03/22/05	09/22/05	03/16/06	03/17/06	06/22/06	05/03/11	11/20/14	06/04/15	11/16/15	10/04/16	10/04/17	11/20/18	09/20/19	10/08/20	09/14/21	09/15/22	05/28/96	05/28/96	03/16/98	03/16/98	07/16/92
Volatile Organics	CAO Goal ¹ Units																									
1,1,2-Trichloroethane	5 ug/L	28 U	39	26	2.3	13	21	8.4	8.4	4.7	75 U	1.3 J		0.76 J [0.66 J]	0.65 J [0.66 J]	1.0 U [10 U]	25 U [40 U]	1.0 U [13 U]	1.0 U [1.0 U]	1.0 U [1.0 U]	10 U [5.0 U]	110	2,500 U	1,000 U	1,000 U	NA
1,2-Dichloroethane	5 ug/L	13.2	8,500	5,000	650	2,900	3,700	1,600	2,100	990	1,300	660	270 [270]	360 [350]	250 [250]	360 D [350]	370 [350]	150 DJ [180 J]	49 [46]	41 J [38]	34 [38]	15,000 E	43,000 D	28,000 D	28,000 D	5,000 U
Chloroethane	ug/L	48 U	23 U	NA	1.8 U	9.2 U	4.8 U	NA 10.11	NA	1.2 U	75 U	2.0 U		5.0 U [5.0 U]	NA	1.0 U [10 U]		1.0 U [13 U]	1.0 U [1.0 U]	10 U [2.0 U]	10 U [5.0 U]	81	5,000 U	NA	NA .	NA
Chloroform	0.19 ug/L	25 U	16	9.5 U	1.7 U	8.5 U	10 U	13 U	10 U	2.6 U	75 U	0.40 J	10 U [13 U]	5.0 U [5.0 U]		1.0 U [10 U]		1.0 U [13 U]	1.0 U [1.0 U]	10 UJ [2.0 U]	10 U [5.0 U]	35	2,500 U	1,000 U	1,000 U	NA 10.000 B
Methylene Chloride	5 ug/L	88 U	40 U	40 U	4.6 U	23 U	10 U	13 U	10 U	2.6 U	75 U	2.0 U	10 U [13 U]	2.8 J [2.7 J]	5.0 U [5.0 U]	1.0 UB [10 UB		38 [44]	53 D [48 D]	35 J [45]	27 [31]	5.0 U	2,500 U	2,500 U	2,500 U	49,000 B
Tetrachloroethene	0 ugr	24 U 370	16 U 250	16 U	1.8 U	9.0 U	9.0 U 83	11 U	9.0 U	2.2 U	75 U	2.0 U	10 U [13 U] 43 [41]	5.0 U [5.0 U] 43 [41]	1.0 U [1.0 U] 51 [50]	NA 54 D.1 (56. II	25 U [40 U]	NA O4 FOT3	1.0 U [1.0 U] 6.9 [6.8]	NA 10 11 172 31	10 U [5.0 U]	510 F	2,500 U	1,000 U 490 JD	1,000 U	NA NA
Trichloroethene cis-1,2-Dichloroethene	5 ug/L	33	41	NA	1.8 U	11	16	NA NA	NA NA	4.7	71 J 75 U	18	14 [15]	17 [16]	NA NA	15 [16]	25 U [40 U]	21 [27] 4.1 [13 U]	1.2 [1.3]	10 UJ [2.3]	10 U [5.0 U]	NA NA	2,500 U NA	490 JD NA	490 JD NA	NA NA
Vinyl Chloride	2 ug/L	29 U	26 U	26 U	1.8 U	8.8 U	5.6 U	7.0 U	5.6 U	4.7 1.4 U	75 U	16	21 [24]	31 [30]	24 [24]	15 [10]	25 U [40 U]	110 D [98]	190 DJ [110 DJ]	59 J[81 DJ]	91 [100]	40	5.000 U	1,000 U	1,000 U	1.7
Vinyi Chloride	2 ug/L	29 U																								
Cartery Discutting	4000 110/	20.11	40.11	4011														NIA				5011	0.50011	4.000.11	4.000.11	NIA
Carbon Disulfide	1000 ug/L	30 U	12 U	12 U	1.2 U	6.2 U	6.8 U	8.5 U	6.8 U	1.7 U	75 U	2.0 U				NA	25 U [40 U]	NA	NA	NA	10 U [5.0 U]	5.0 U	2,500 U	1,000 U	1,000 U	NA
Carbon Disulfide	1000 ug/L		12 U MW-4	12 U MW-4														NA MW-4				5.0 U	2,500 U MW-4	1,000 U	1,000 U	NA MW-4
Carbon Disulfide	,): MW-4			1.2 U	6.2 U	6.8 U	8.5 U	6.8 U	1.7 U	75 U	2.0 U	10 U [13 U]	5.0 U [5.0 U]	1.0 U [1.0 U]	NA	25 U [40 U]		NA	NA	10 U [5.0 U]					
Carbon Disulfide Volatile Organics	Location I): MW-4	MW-4	MW-4	1.2 U MW-4	6.2 U MW-4 12/16/98	6.8 U MW-4	8.5 U MW-4 11/14/01	6.8 U MW-4	1.7 U	75 U MW-4	2.0 U	10 U [13 U]	5.0 U [5.0 U]	1.0 U [1.0 U]	NA MW-4	25 U [40 U] MW-4 09/22/05	MW-4	NA MW-4 06/22/06	NA MW-4	10 U [5.0 U]	MW-4	MW-4	MW-4 10/04/16	MW-4	MW-4 11/20/18
Volatile Organics 1,1,2-Trichloroethane	Location II Sample Dat CAO Goal ¹ Units 5 ug/L): MW-4	MW-4 10/23/97	MW-4 02/26/98	1.2 U MW-4	6.2 U MW-4	6.8 U MW-4	8.5 U MW-4	6.8 U MW-4	1.7 U MW-4 10/07/02	75 U MW-4	2.0 U MW-4 10/09/03	MW-4 03/18/04	5.0 U [5.0 U] MW-4 10/11/04 0.30 U	1.0 U [1.0 U]	MW-4 03/22/05	25 U [40 U] MW-4 09/22/05	MW-4	NA MW-4	MW-4 05/03/11	10 U [5.0 U] MW-4 11/20/14 1.0 U [1.0 U]	MW-4 06/04/15	MW-4 11/16/15	MW-4 10/04/16	MW-4 10/03/17	MW-4 11/20/18
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane	Location Sample Dat CAO Goal Units 5 ug/L 5 ug/L	2: MW-4 2: 11/01/94 2: 200 U 25 J	MW-4 10/23/97 10,000 U 63,000	MW-4 02/26/98 10 U 110	1.2 U MW-4 07/22/98 2.0 U 27	6.2 U MW-4 12/16/98 2.0 U 56	6.8 U MW-4 04/14/99 1.8 U 85	8.5 U MW-4 11/14/01 0.20 U 25	6.8 U MW-4 12/19/01 0.20 U 8.4	1.7 U MW-4 10/07/02 0.30 U 2.6	75 U MW-4 03/03/03 0.30 U 32	2.0 U MW-4 10/09/03 0.30 U 0.90	MW-4 03/18/04 0.30 U 1.9	5.0 U [5.0 U] MW-4 10/11/04 0.30 U 0.70	1.0 U [1.0 U] MW-6 11/01/94	NA MW-4 03/22/05 0.30 U 5.5	25 U [40 U] MW-4 09/22/05 0.30 U 0.30 U	MW-4 03/17/06 0.30 U 18	NA MW-4 06/22/06 0.30 U 26	MW-4 05/03/11 1.0 U 1.0 U	10 U [5.0 U] MW-4 11/20/14 1.0 U [1.0 U] 0.31 J [0.28 J]	MW-4 06/04/15 1.0 U 0.27 J	MW-4 11/16/15 1.0 U 0.35 J	MW-4 10/04/16 5.0 U 1.0 U	MW-4 10/03/17 1.0 U 1.0 U	MW-4 11/20/18 1.0 U 1.0 U
Volatile Organics 1.1.2-Trichloroethane 1.2-Dichloroethane Chloroethane	Location Sample Dat	2: MW-4 2: 11/01/94 200 U 25 J 200 U	MW-4 10/23/97 10,000 U 63,000 NA	MW-4 02/26/98 10 U 110 NA	1.2 U MW-4 07/22/98 2.0 U 27 NA	6.2 U MW-4 12/16/98 2.0 U 56 NA	6.8 U MW-4 04/14/99 1.8 U 85 NA	8.5 U MW-4 11/14/01 0.20 U 25 NA	6.8 U MW-4 12/19/01 0.20 U 8.4 NA	1.7 U MW-4 10/07/02 0.30 U 2.6 NA	75 U MW-4 03/03/03 0.30 U 32 0.50 U	2.0 U MW-4 10/09/03 0.30 U 0.90 0.50 U	10 U [13 U] MW-4 03/18/04 0.30 U 1.9 NA	5.0 U [5.0 U] MW-4 10/11/04 0.30 U 0.70 0.40 U	1.0 U [1.0 U] MW-6 11/01/94 10 U 30 10 U	NA MW-4 03/22/05 0.30 U 5.5 0.40 U	25 U [40 U] MW-4 09/22/05 0.30 U 0.30 U 0.20 U	MW-4 03/17/06 0.30 U 18 NA	NA MW-4 06/22/06 0.30 U 26 1.1	NA MW-4 05/03/11 1.0 U 1.0 U 1.0 U	10 U [5.0 U] MW-4 11/20/14 1.0 U [1.0 U] 0.31 J [0.28 J] 1.0 U [1.0 U]	MW-4 06/04/15 1.0 U 0.27 J 1.0 U	MW-4 11/16/15 1.0 U 0.35 J 1.0 U	MW-4 10/04/16 5.0 U 1.0 U NA	1.0 U 1.0 U 1.0 U	1.0 U 1.0 U 1.0 U
Volatile Organics 1.1,2-Trichloroethane 1.2-Dichloroethane Chloroethane Chloroform	CAO Goal Units 5 ug/L 5 ug/L ug/L 0.19 ug/L	2: MW-4 2: 11/01/94 200 U 25 J 200 U 25 J	MW-4 10/23/97 10,000 U 63,000 NA 10 U	MW-4 02/26/98 10 U 110 NA 10 U	1.2 U MW-4 07/22/98 2.0 U 27 NA 2.0 U	6.2 U MW-4 12/16/98 2.0 U 56 NA 2.0 U	6.8 U MW-4 04/14/99 1.8 U 85 NA 3.0 U	8.5 U MW-4 11/14/01 0.20 U 25 NA 0.20 U	6.8 U MW-4 12/19/01 0.20 U 8.4 NA 0.20 U	1.7 U MW-4 10/07/02 0.30 U 2.6 NA 0.20 U	75 U MW-4 03/03/03 0.30 U 32 0.50 U 0.20 U	2.0 U MW-4 10/09/03 0.30 U 0.90 0.50 U 0.20 U	10 U [13 U] MW-4 03/18/04 0.30 U 1.9 NA 0.20 U	0.30 U 0.70 0.40 U 0.30 U	1.0 U [1.0 U] MW-6 11/01/94 10 U 30 10 U 1.0 J	NA MW-4 03/22/05 0.30 U 5.5 0.40 U 0.30 U	25 U [40 U] MW-4 09/22/05 0.30 U 0.30 U 0.20 U 0.50 U	MW-4 03/17/06 0.30 U 18 NA 0.50 U	NA MW-4 06/22/06 0.30 U 26 1.1 0.50 U	NA MW-4 05/03/11 1.0 U 1.0 U 1.0 U 1.0 U	10 U [5.0 U] MW-4 11/20/14 1.0 U [1.0 U] 0.31 J [0.28 J] 1.0 U [1.0 U] 1.0 U [1.0 U]	MW-4 06/04/15 1.0 U 0.27 J 1.0 U 1.0 U	1.0 U 0.35 J 1.0 U 1.0 U	MW-4 10/04/16 5.0 U 1.0 U NA 1.0 U	1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	MW-4 11/20/18 1.0 U 1.0 U 1.0 U 1.0 U
Volatile Organics 1.1.2-Trichloroethane 1.2-Dichloroethane Chloroform Methylene Chloride Methylene Chloride	CAO Goal Units 5 ug/L ug/L 0.19 ug/L 5 ug/L 5 ug/L 5 ug/L ug/L 0.19 ug/L 5 ug/L 5 ug/L 5 ug/L 5 ug/L 5 ug/L 5 ug/L ug/L	2: MW-4 2: 11/01/94 200 U 25 J 200 U 25 J 2,700	MW-4 10/23/97 10,000 U 63,000 NA 10 U 440 D	MW-4 02/26/98 10 U 110 NA 10 U 490 D	1.2 U MW-4 07/22/98 2.0 U 27 NA 2.0 U 190	6.2 U MW-4 12/16/98 2.0 U 56 NA 2.0 U 140 D	6.8 U MW-4 04/14/99 1.8 U 85 NA 3.0 U 450	8.5 U MW-4 11/14/01 0.20 U 25 NA 0.20 U 1.0 U	6.8 U MW-4 12/19/01 0.20 U 8.4 NA 0.20 U 1.0 U	1.7 U MW-4 10/07/02 0.30 U 2.6 NA 0.20 U 0.90 U	75 U MW-4 03/03/03 0.30 U 32 0.50 U 0.20 U 0.90 U	2.0 U MW-4 10/09/03 0.30 U 0.90 0.50 U 0.20 U 0.80 U	10 U [13 U] MW-4 03/18/04 0.30 U 1.9 NA 0.20 U 0.80 U	5.0 U [5.0 U] MW-4 10/11/04 0.30 U 0.70 0.40 U 0.30 U 0.90 U	1.0 U [1.0 U] MW-6 11/01/94 10 U 30 10 U 1.0 J 10 U	NA MW-4 03/22/05 0.30 U 5.5 0.40 U 0.30 U 0.90 U	25 U [40 U] MW-4 09/22/05 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U	MW-4 03/17/06 0.30 U 18 NA 0.50 U 0.50 U	NA MW-4 06/22/06 0.30 U 26 1.1 0.50 U 0.50 U	NA MW-4 05/03/11 1.0 U 1.0 U 1.0 U 1.0 U	10 U [5.0 U] MW-4 11/20/14 1.0 U [1.0 U] 0.31 J [0.28 J] 1.0 U [1.0 U] 1.0 U [1.0 U] 1.0 U [1.0 U]	MW-4 06/04/15 1.0 U 0.27 J 1.0 U 1.0 U 1.0 U	MW-4 11/16/15 1.0 U 0.35 J 1.0 U 1.0 U 1.0 U	MW-4 10/04/16 5.0 U 1.0 U NA 1.0 U 5.0 U	MW-4 10/03/17 1.0 U 1.0 U 1.0 U 1.0 U	MW-4 11/20/18 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane Chloroethane Chloroform Methylene Chloride Tetrachloroethene	Location II Sample Dat CAO Goal* Units 5 ug/L	2: MW-4 2: 11/01/94 200 U 25 J 200 U 25 J 2,700 200 U	MW-4 10/23/97 10,000 U 63,000 NA 10 U 440 D 10 U	MW-4 02/26/98 10 U 110 NA 10 U 490 D 10 U	1.2 U MW-4 07/22/98 2.0 U 27 NA 2.0 U 190 2.0 U	6.2 U MW-4 12/16/98 2.0 U 56 NA 2.0 U 140 D 2.0 U	6.8 U MW-4 04/14/99 1.8 U 85 NA 3.0 U 450 3.1 U	8.5 U MW-4 11/14/01 0.20 U 25 NA 0.20 U 1.0 U 0.30 U	6.8 U MW-4 12/19/01 0.20 U 8.4 NA 0.20 U 1.0 U 0.30 U	1.7 U MW-4 10/07/02 0.30 U 2.6 NA 0.20 U 0.90 U 0.20 U	75 U MW-4 03/03/03 0.30 U 32 0.50 U 0.20 U 0.90 U 0.20 U	2.0 U MW-4 10/09/03 0.30 U 0.90 0.50 U 0.20 U 0.80 U 0.30 U	MW-4 03/18/04 0.30 U 1.9 NA 0.20 U 0.80 U 0.80 U	0.30 U 0.70 0.40 U 0.90 U 0.90 U 0.40 U	1.0 U [1.0 U] MW-6 11/01/94 10 U 30 10 U 1.0 U 1.0 U 10 U	NA MW-4 03/22/05 0.30 U 5.5 0.40 U 0.30 U 0.90 U 0.40 U	25 U [40 U] MW-4 09/22/05 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U	MW-4 03/17/06 0.30 U 18 NA 0.50 U 0.50 U 0.40 U	NA MW-4 06/22/06 0.30 U 26 1.1 0.50 U 0.50 U 0.40 U	NA MW-4 05/03/11 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	10 U [5.0 U] MW-4 11/20/14 1.0 U [1.0 U] 0.31 J [0.28 J] 1.0 U [1.0 U] 1.0 U [1.0 U] 1.0 U [1.0 U] 1.0 U [1.0 U]	MW-4 06/04/15 1.0 U 0.27 J 1.0 U 1.0 U 1.0 U	1.0 U 0.35 J 1.0 U 1.0 U 1.0 U 1.0 U	MW-4 10/04/16 5.0 U 1.0 U NA 1.0 U 5.0 U 1.0 U	1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U NA	1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U
Volatile Organics 1.1,2-Trichloroethane 1.2-Dichloroethane Chloroethane Chloroform Methylene Chloride Tetrachloroethene Trichloroethene	Location I Sample Dat CAO Goal Units 5 ug/L 5 ug/L	0: MW-4 0: 11/01/94 200 U 25 J 200 U 25 J 2,700 200 U 200 U	MW-4 10/23/97 10,000 U 63,000 NA 10 U 440 D 10 U	MW-4 02/26/98 10 U 110 NA 10 U 490 D 10 U	1.2 U MW-4 07/22/98 2.0 U 27 NA 2.0 U 190 2.0 U 2.0 U	6.2 U MW-4 12/16/98 2.0 U 56 NA 2.0 U 140 D 2.0 U 2.0 U	6.8 U MW-4 04/14/99 1.8 U 85 NA 3.0 U 450	8.5 U MW-4 11/14/01 0.20 U 25 NA 0.20 U 1.0 U 0.30 U 0.30 U	6.8 U MW-4 12/19/01 0.20 U 8.4 NA 0.20 U 1.0 U 0.30 U 0.30 U	1.7 U MW-4 10/07/02 0.30 U 2.6 NA 0.20 U 0.90 U 0.10 U	75 U MW-4 03/03/03 0.30 U 32 0.50 U 0.20 U 0.90 U	2.0 U MW-4 10/09/03 0.30 U 0.90 0.50 U 0.20 U 0.80 U	10 U [13 U] MW-4 03/18/04 0.30 U 1.9 NA 0.20 U 0.80 U	5.0 U [5.0 U] MW-4 10/11/04 0.30 U 0.70 0.40 U 0.30 U 0.90 U 0.40 U 0.40 U	1.0 U [1.0 U] MW-6 11/01/94 10 U 30 10 U 1.0 U 1.0 U 3.0 U	NA 03/22/05 0.30 U 5.5 0.40 U 0.30 U 0.90 U 0.40 U	25 U [40 U] MW-4 09/22/05 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U	MW-4 03/17/06 0.30 U 18 NA 0.50 U 0.50 U 0.40 U 0.40 U	NA MW-4 06/22/06 0.30 U 26 1.1 0.50 U 0.50 U 0.40 U 0.40 U	NA MW-4 05/03/11 1.0 U	10 U [5.0 U] MW-4 11/20/14 1.0 U [1.0 U] 0.31 J [0.28 J] 1.0 U [1.0 U]	MW-4 06/04/15 1.0 U 0.27 J 1.0 U 1.0 U 1.0 U 1.0 U	MW-4 11/16/15 1.0 U 0.35 J 1.0 U 1.0 U 1.0 U	5.0 U 1.0 U NA 1.0 U 5.0 U 1.0 U 1.0 U	1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U NA 1.0 U	1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane Chloroethane Chloroform Methylene Chloride Tetrachloroethene	Location I Sample Dat CAO Goal Units 5 ug/L 5 ug/L	2: MW-4 2: 11/01/94 200 U 25 J 200 U 25 J 2,700 200 U	MW-4 10/23/97 10,000 U 63,000 NA 10 U 440 D 10 U	MW-4 02/26/98 10 U 110 NA 10 U 490 D 10 U	1.2 U MW-4 07/22/98 2.0 U 27 NA 2.0 U 190 2.0 U	6.2 U MW-4 12/16/98 2.0 U 56 NA 2.0 U 140 D 2.0 U	6.8 U MW-4 04/14/99 1.8 U 85 NA 3.0 U 450 3.1 U 2.2 U	8.5 U MW-4 11/14/01 0.20 U 25 NA 0.20 U 1.0 U 0.30 U	6.8 U MW-4 12/19/01 0.20 U 8.4 NA 0.20 U 1.0 U 0.30 U	1.7 U MW-4 10/07/02 0.30 U 2.6 NA 0.20 U 0.90 U 0.20 U	75 U MW-4 03/03/03 0.30 U 32 0.50 U 0.20 U 0.90 U 0.20 U 0.10 U	2.0 U MW-4 10/09/03 0.30 U 0.90 0.50 U 0.20 U 0.80 U 0.30 U 0.20 U 0.20 U	MW-4 03/18/04 0.30 U 1.9 NA 0.20 U 0.80 U 0.30 U	0.30 U 0.70 0.40 U 0.90 U 0.90 U 0.40 U	1.0 U [1.0 U] MW-6 11/01/94 10 U 30 10 U 1.0 U 1.0 U 10 U	NA MW-4 03/22/05 0.30 U 5.5 0.40 U 0.30 U 0.90 U 0.40 U	25 U [40 U] MW-4 09/22/05 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U 0.40 U	MW-4 03/17/06 0.30 U 18 NA 0.50 U 0.50 U 0.40 U	NA MW-4 06/22/06 0.30 U 26 1.1 0.50 U 0.50 U 0.40 U	NA MW-4 05/03/11 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	10 U [5.0 U] MW-4 11/20/14 1.0 U [1.0 U] 0.31 J [0.28 J] 1.0 U [1.0 U] 1.0 U [1.0 U] 1.0 U [1.0 U] 1.0 U [1.0 U]	MW-4 06/04/15 1.0 U 0.27 J 1.0 U 1.0 U 1.0 U	1.0 U 0.35 J 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	MW-4 10/04/16 5.0 U 1.0 U NA 1.0 U 5.0 U 1.0 U	1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U NA	1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U
Volatile Organics 1,1,2-Trichlorcethane 1,2-Dichlorcethane Chloroethane Chloroform Methylene Chloride Tetrachloroethene Trichloroethene Est-1,2-Dichloroethene	Location I Sample Dat CAO Goal ¹ Units 5 ug/L 5 ug/L 0.19 ug/L 5 ug/L	0: MW-4 11/01/94 200 U 25 J 200 U 25 J 200 U 25 J 2,700 200 U 200 U NA	MW-4 10/23/97 10,000 U 63,000 NA 10 U 440 D 10 U 10 U NA	MW-4 02/26/98 10 U 110 NA 10 U 490 D 10 U 10 U NA	1.2 U MW-4 07/22/98 2.0 U 27 NA 2.0 U 190 2.0 U 190 2.0 U NA	6.2 U MW-4 12/16/98 2.0 U 56 NA 2.0 U 140 D 2.0 U NA	6.8 U MW-4 04/14/99 1.8 U 85 NA 3.0 U 450 3.1 U 2.2 U NA	8.5 U MW-4 11/14/01 0.20 U 25 NA 0.20 U 1.0 U 0.30 U NA	6.8 U MW-4 12/19/01 0.20 U 8.4 NA 0.20 U 1.0 U 0.30 U NA	1.7 U MW-4 10/07/02 0.30 U 2.6 NA 0.20 U 0.90 U 0.20 U 0.10 U NA	75 U MW-4 03/03/03 0.30 U 32 0.50 U 0.20 U 0.90 U 0.10 U 9.0	2.0 U MW-4 10/09/03 0.30 U 0.90 0.50 U 0.20 U 0.80 U 0.30 U 0.20 U 4.0	MW-4 03/18/04 0.30 U 1.9 NA 0.20 U 0.80 U 0.30 U 0.20 U NA	5.0 U [5.0 U] MW-4 10/11/04 0.30 U 0.70 0.40 U 0.90 U 0.40 U 0.40 U 2.4	1.0 U [1.0 U] MW-6 11/01/94 10 U 30 10 U 1.0 U 10 U 30 10 U 10 U NA	NA MW-4 03/22/05 0.30 U 5.5 0.40 U 0.30 U 0.90 U 0.40 U 0.40 U 5.2	25 U [40 U] MW-4 09/22/05 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 2.1	MW-4 03/17/06 0.30 U 18 NA 0.50 U 0.50 U 0.40 U 0.40 U NA	NA MW-4 06/22/06 0.30 U 26 1.1 0.50 U 0.50 U 0.40 U 0.40 U 6.4	NA 05/03/11 1.0 U	10 U [5.0 U] MW-4 11/20/14 1.0 U [1.0 U] 0.31 J [0.28 J] 1.0 U [1.0 U] 0.80 J [0.84 J]	1.0 U 0.27 J 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	1.0 U 0.35 J 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	MW-4 10/04/16 5.0 U 1.0 U NA 1.0 U 5.0 U 1.0 U NA	1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U NA 1.0 U 1.5	1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane Chloroethane Chloroform Methylene Chloride Tetrachloroethene richloroethene cis-1,2-Dichloroethene viryl Chloride	Location I Sample Dat CAG Goat Units 5 ug/L 5 ug/L 0.19 ug/L 5 ug/L 5 ug/L 10 ug/L	2: MW-4 2: 11/01/94 200 U 25 J 200 U 25 J 200 U 25 J 2.700 200 U 200 U 200 U 200 U 200 U	MW-4 10/23/97 10,000 U 63,000 NA 10 U 440 D 10 U 10 U 10 U 10 U 10 U	MW-4 02/26/98 10 U 110 NA 10 U 490 D 10 U 10 U NA 10 U 10 U 10 U	1.2 U MW-4 07/22/98 2.0 U 27 NA 2.0 U 190 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U	6.2 U MW-4 12/16/98 2.0 U 56 NA 2.0 U 140 D 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U	6.8 U MW-4 04/14/99 1.8 U 85 NA 3.0 U 450 3.1 U 2.2 U NA 3.6 U 2.8 U	8.5 U MW-4 11/14/01 0.20 U 25 NA 0.20 U 1.0 U 0.30 U 0.30 U NA 2.8 0.20 U	6.8 U MW-4 12/19/01 0.20 U 8.4 NA 0.20 U 1.0 U 0.30 U 0.30 U NA 2.1 0.20 U	1.7 U MW-4 10/07/02 0.30 U 2.6 NA 0.20 U 0.90 U 0.10 U NA 0.30 U 0.30 U	75 U MW-4 03/03/03 0.30 U 32 0.50 U 0.20 U 0.90 U 0.10 U 9.0 0.30 U	2.0 U MW-4 10/09/03 0.30 U 0.90 0.50 U 0.20 U 0.80 U 0.30 U 0.20 U 4.0 1.5 0.20 U	MW-4 03/18/04 0.30 U 1.9 NA 0.20 U 0.30 U 0.30 U 0.20 U NA 1.8 0.20 U	5.0 U 5.0 U	1.0 U [1.0 U] MW-6 11/01/94 10 U 30 10 U 1.0 U 10 U 3.0 J NA 10 U	NA MW-4 03/22/05 0.30 U 5.5 0.40 U 0.30 U 0.40 U 0.40 U 5.2 2.1 0.20 U	25 U (40 U) MW-4 09/22/05 0.30 U 0.30 U 0.50 U 0.50 U 0.40 U 0.40 U 2.1 3.2 0.80	MW-4 03/17/06 18 NA 0.50 U 0.50 U 0.40 U 0.40 U NA 1.7 0.30 U	NA MW-4 06/22/06 0.30 U 26 1.1 0.50 U 0.40 U 0.40 U 0.40 U 6.4 1.5 1.0	NA MW-4 05/03/11 1.0 U	10 U [5.0 U] MW-4 11/20/14 1.0 U [1.0 U] 0.31 J [0.28 J] 1.0 U [1.0 U]	MW-4 06/04/15 1.0 U 0.27 J 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 0.94 J 0.76 J 1.0 U	1.0 U 0.35 J 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	MW-4 10/04/16 5.0 U 1.0 U NA 1.0 U 5.0 U 1.0 U 1.0 U NA 0.91 J	MW-4 10/03/17 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U NA 1.0 U NA 1.0 U NA	MW-4 11/20/18 1.0 U 1.0 U
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chlorodrane Chloroform Methylene Chloride Tetrachloroethene Trichloroethene ids-1,2-Dichloroethene ids-1,2-Dichloroethene Virty Chloride	Location	2: MW-4 2: 11/01/94 2: 11/01/94 2: 20 U 25 J 2: 200 U 25 J 2: 2700 2: 200 U NA 2: 200 U	MW-4 10/23/97 10,000 U 63,000 NA 10 U 440 D 10 U 10 U NA 10 U	MW-4 02/26/98 10 U 110 NA 10 U 490 D 10 U 10 U NA 10 U	1.2 U MW-4 07/22/98 2.0 U 27 NA 2.0 U 190 2.0 U 2.0 U NA 2.0 U NA	6.2 U MW-4 12/16/98 2.0 U 56 NA 2.0 U 140 D 2.0 U NA 2.0 U NA	6.8 U MW-4 04/14/99 1.8 U 85 NA 3.0 U 450 3.1 U 2.2 U NA 3.6 U	8.5 U MW-4 11/14/01 0.20 U 25 NA 0.20 U 1.0 U 0.30 U 0.30 U NA 2.8	6.8 U MW-4 12/19/01 0.20 U 8.4 NA 0.20 U 1.0 U 0.30 U 0.30 U NA 2.1	1.7 U MW-4 10/07/02 0.30 U 2.6 NA 0.20 U 0.90 U 0.10 U NA 0.30 U MW-5	75 U MW-4 03/03/03 0.30 U 32 0.50 U 0.20 U 0.90 U 0.10 U 9.0 0.30 U	2.0 U MW-4 10/09/03 0.30 U 0.90 0.50 U 0.20 U 0.80 U 0.30 U 0.20 U 4.0 1.5	MW-4 03/18/04 0.30 U 1.9 NA 0.20 U 0.80 U 0.30 U 0.20 U 0.20 U 0.30 U	5.0 U [5.0 U] MW-4 10/11/04 0.30 U 0.70 0.40 U 0.30 U 0.90 U 0.40 U 2.4 2.3	1.0 U [1.0 U] MW-6 11/01/94 10 U 30 10 U 1.0 U 1.0 U 3.0 J NA 10 U	NA MW-4 03/22/05 0.30 U 5.5 0.40 U 0.30 U 0.40 U 0.40 U 5.2 2.1 0.20 U MW-6	25 U (40 U) MW-4 09/22/05 0.30 U 0.30 U 0.50 U 0.50 U 0.40 U 0.40 U 2.1 3.2	MW-4 03/17/06 18 NA 0.50 U 0.50 U 0.40 U 0.40 U NA 1.7	NA MW-4 06/22/06 0.30 U 26 1.1 0.50 U 0.50 U 0.40 U 0.40 U 6.4 1.5	NA MW-4 05/03/11 1.0 U	10 U [5.0 U] MW-4 11/20/14 1.0 U [1.0 U] 0.31 J [0.28 J] 1.0 U [1.0 U] 0.80 J [0.84 J] 0.80 J [0.82 J]	MW-4 06/04/15 1.0 U 0.27 J 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 0.94 J 0.76 J	1.0 U 0.35 J 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	MW-4 10/04/16 5.0 U 1.0 U NA 1.0 U 5.0 U 1.0 U 1.0 U NA	MW-4 10/03/17 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U NA 1.0 U 1.5 U 1.0 U NA	MW-4 11/20/18 1.0 U MW-6
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chlorodrane Chloroform Methylene Chloride Tetrachloroethene Trichloroethene ids-1,2-Dichloroethene ids-1,2-Dichloroethene Virty Chloride	Location I Sample Dat CAG Goat Units 5 ug/L 5 ug/L 0.19 ug/L 5 ug/L 5 ug/L 10 ug/L	2: MW-4 2: 11/01/94 2: 11/01/94 2: 20 U 25 J 2: 200 U 25 J 2: 2700 2: 200 U NA 2: 200 U	MW-4 10/23/97 10,000 U 63,000 NA 10 U 440 D 10 U 10 U 10 U 10 U 10 U	MW-4 02/26/98 10 U 110 NA 10 U 490 D 10 U 10 U NA 10 U 10 U 10 U	1.2 U MW-4 07/22/98 2.0 U 27 NA 2.0 U 190 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U	6.2 U MW-4 12/16/98 2.0 U 56 NA 2.0 U 140 D 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U	6.8 U MW-4 04/14/99 1.8 U 85 NA 3.0 U 450 3.1 U 2.2 U NA 3.6 U 2.8 U	8.5 U MW-4 11/14/01 0.20 U 25 NA 0.20 U 1.0 U 0.30 U 0.30 U NA 2.8 0.20 U	6.8 U MW-4 12/19/01 0.20 U 8.4 NA 0.20 U 1.0 U 0.30 U 0.30 U NA 2.1 0.20 U	1.7 U MW-4 10/07/02 0.30 U 2.6 NA 0.20 U 0.90 U 0.10 U NA 0.30 U 0.30 U	75 U MW-4 03/03/03 0.30 U 32 0.50 U 0.20 U 0.90 U 0.10 U 9.0 0.30 U	2.0 U MW-4 10/09/03 0.30 U 0.90 0.50 U 0.20 U 0.80 U 0.30 U 0.20 U 4.0 1.5 0.20 U	MW-4 03/18/04 0.30 U 1.9 NA 0.20 U 0.30 U 0.30 U 0.20 U NA 1.8 0.20 U	5.0 U 5.0 U	1.0 U [1.0 U] MW-6 11/01/94 10 U 30 10 U 1.0 U 10 U 3.0 J NA 10 U	NA MW-4 03/22/05 0.30 U 5.5 0.40 U 0.30 U 0.40 U 0.40 U 5.2 2.1 0.20 U	25 U (40 U) MW-4 09/22/05 0.30 U 0.30 U 0.50 U 0.50 U 0.40 U 0.40 U 2.1 3.2 0.80	MW-4 03/17/06 18 NA 0.50 U 0.50 U 0.40 U 0.40 U NA 1.7 0.30 U	NA MW-4 06/22/06 0.30 U 26 1.1 0.50 U 0.40 U 0.40 U 0.40 U 6.4 1.5 1.0	NA MW-4 05/03/11 1.0 U	10 U [5.0 U] MW-4 11/20/14 1.0 U [1.0 U] 0.31 J [0.28 J] 1.0 U [1.0 U]	MW-4 06/04/15 1.0 U 0.27 J 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 0.94 J 0.76 J 1.0 U	1.0 U 0.35 J 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	MW-4 10/04/16 5.0 U 1.0 U NA 1.0 U 5.0 U 1.0 U 1.0 U NA 0.91 J	MW-4 10/03/17 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U NA 1.0 U NA 1.0 U NA	MW-4 11/20/18 1.0 U 1.0 U
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chloroethane Chloroform Methylene Chloride Tetrachloroethene Trichloroethene ids1,2-Dichloroethene Viryl Chloride Carbon Disuffide	Location	2: MW-4 2: 11/01/94 2: 11/01/94 2: 25 J 2: 200 U 2: 5 J 2: 200 U 2: 200 U 2: 300 U	MW-4 10/23/97 10,000 U 63,000 NA 10 U 440 D 10 U NA 10 U MW-4	MW-4 02/26/98 10 U 110 NA 10 U	1.2 U MW-4 07/22/98 2.0 U 27 NA 2.0 U 190 2.0 U 2.0 U 2.0 U NA 2.0 U MW-4 09/14/22	6.2 U MW-4 12/16/98 2.0 U 56 NA 2.0 U 140 D 2.0 U NA 2.0 U NA 2.0 U 7/16/92	6.8 U MW-4 04/14/99 1.8 U 85 NA 3.0 U 450 3.1 U 2.2 U NA 3.6 U 2.8 U MW-5	8.5 U MW-4 11/14/01 25 NA 0.20 U 25 NA 0.20 U 1.0 U 30 U 0.30 U NA 2.8 0.20 U MW-5 10/22/97	6.8 U MW-4 12/19/01 0.20 U 8.4 NA 0.20 U 1.0 U 0.30 U 0.30 U NA 2.1 0.20 U MW-5	1.7 U MW-4 10/07/02 0.30 U 2.6 NA 0.20 U 0.90 U 0.10 U NA 0.30 U 0.30 U MW-5 07/22/98	75 U MW-4 03/03/03 0.30 U 32 0.50 U 0.20 U 0.90 U 0.10 U 9.0 0.30 U MW-5	2.0 U MW-4 10/09/03 0.30 U 0.90 0.50 U 0.20 U 0.80 U 0.30 U 1.5 0.20 U MW-5 04/14/99	MW-4 03/18/04 0.30 U 1.9 NA 0.20 U 0.30 U 1.9 NA 0.20 U 0.30 U 0.20 U MA 1.8 0.20 U MW-5 03/16/06	5.0 U 5.0 U MW-4 10/11/04 0.30 U 0.70 0.40 U 0.30 U 0.90 U 0.40 U 2.4 2.3 0.20 U MW-5D 12/07/06	1.0 U [1.0 U] MW-6 11/01/94 10 U 30 10 U 1.0 J 10 U 3.0 J NA 10 U MW-6 10/24/97	NA MW-4 03/22/05 0.30 U 5.5 0.40 U 0.30 U 0.40 U 0.40 U 5.2 2.1 0.20 U MW-6 02/24/98	25 U 40 U MW-4 09/22/05 0.30 U 0.30 U 0.20 U 0.50 U 0.40 U 2.1 3.2 0.80 MW-6 07/22/98	MW-4 03/17/06 0.30 U 18 NA 0.50 U 0.40 U 0.40 U NA 1.7 0.30 U MW-6 12/14/98	NA MW-4 06/22/06 0.30 U 26 1.1 0.50 U 0.50 U 0.40 U 0.40 U 6.4 1.5 1.0	NA MW-4 05/03/11 1.0 U MW-6	10 U [5.0 U] MW-4 11/20/14 1.0 U [1.0 U] 0.31 J [0.28 J] 1.0 U [1.0 U] MW-6 12/19/01	MW-4 06/04/15 1.0 U 0.27 J 1.0 U 1.0 U 1.0 U 1.0 U 0.94 J 0.76 J 1.0 U MW-6	11/16/15 1.0 U 0.35 J 1.0 U 1	MW-4 10/04/16 5.0 U 1.0 U NA 1.0 U 5.0 U 1.0 U NA 0.91 J 1.0 U MW-6 10/09/03	MW-4 10/03/17 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U NA 1.0 U NA 1.0 U NA 1.0 U NA 1.0 U NA	MW-4 11/20/18 1.0 U 1.0
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chloroform Methylene Chloride Tetrachloroethene Trichloroethene 0s-1,2-Dichloroethene Carbon Deutlide Volatile Organics 1,1,2-Trichloroethane	Location	2: MW-4 2: 11/01/94 2: 200 U 2:5 J 2:00 U 2:5 J 2:700 2:00 U 3:00	MW-4 10/23/97 10,000 U 63,000 NA 10 U 440 D 10 U 10 U 10 U NA 10 U MW-4 10/08/20	MW-4 02/26/98 10 U 110 NA 10 U 490 D 10 U 10 U 10 U 10 U 09/14/21	1.2 U MW-4 07/22/98 2.0 U 27 NA 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U MW-4 09/14/22	6.2 U MW-4 12/16/98 2.0 U 56 NA 2.0 U 140 D 2.0 U 2.0 U 2.0 U NA 2.0 U MW-5 07/16/92	6.8 U MW-4 04/14/99 1.8 U 85 NA 3.0 U 450 3.1 U 2.2 U NA 3.6 U 2.8 U MW-5 11/01/94	8.5 U MW-4 11/14/01 0.20 U 25 NA 0.20 U 1.0 U 0.30 U 0.30 U NA 2.8 0.20 U MW-5 10/22/97	6.8 U MW-4 12/19/01 0.20 U 8.4 NA 0.20 U 1.0 U 0.30 U 0.30 U NA 2.1 0.20 U MW-5 02/24/98	1.7 U MW-4 10/07/02 0.30 U 2.6 NA 0.20 U 0.90 U 0.10 U NA 0.30 U 0.70 U	75 U MW-4 03/03/03 0.30 U 32 0.50 U 0.20 U 0.90 U 0.20 U 0.10 U 9.0 0.30 U 3.0 U 4.10 U 9.0 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U	2.0 U MW-4 10/09/03 0.30 U 0.90 0.50 U 0.20 U 0.80 U 0.30 U 0.20 U 4.0 1.5 0.20 U MW-5 04/14/99	10 U [13 U] MW-4 03/18/04 0.30 U 1.9 NA 0.20 U 0.80 U 0.30 U NA 1.8 0.20 U NA 1.8 0.20 U MW-5 0.30 U 0.30 U	5.0 U [5.0 U] MW-4 10/11/04 0.30 U 0.70 0.40 U 0.30 U 0.40 U 0.40 U 2.4 2.3 0.20 U MW-5D 12/07/06	1.0 U [1.0 U] MW-6 11/01/94 10 U 30 10 U 10 U 30, 10 U 10 U 30, 10 U 10 U 10 U MV-6 MW-6	NA MW-4 03/22/05 0.30 U 5.5 0.40 U 0.30 U 0.40 U 0.40 U 5.2 2.1 0.20 U MW-6	25 U 40 U MW-4 09/22/05 0.30 U 0.30 U 0.50 U 0.50 U 0.40 U 2.1 3.2 0.80	MW-4 03/17/06 0.30 U 0.30 U NA 0.50 U 0.50 U 0.40 U NA 1.7 0.30 U MW-6 12/14/98	NA MW-4 06/22/06 0.30 U 26 1.1 0.50 U 0.40 U 0.40 U 0.40 U 6.4 1.5 1.0 MW-6 04/14/99	NA MW-4 05/03/11 1.0 U MW-6	10 U [5.0 U] MW-4 11/20/14 1.0 U [1.0 U] 0.31 J [0.28 J] 1.0 U [1.0 U] MW-6 12/19/01	MW-4 06/04/15 1.0 U 0.27 J 1.0 U 0.94 J 0.76 J 1.0 U MW-6	MW-4 11/16/15 1.0 U 0.35 J 1.0 U 1.1 U 1.0 U 1.1 U 1.0	MW-4 10/04/16 5.0 U 1.0 U NA 1.0 U 5.0 U 1.0 U NA 1.0 U 1.0 U 1.0 U MW-6 10/09/03	MW-4 10/03/17 1.0 U NA 1.0 U NA 1.5 1.0 U NA MW-6 03/18/04	MW-4 11/20/18 1.0 U 0.30 U
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chlorodram Methylene Chloride Tetrachloroethene Trichloroethene icis-1,2-Dichloroethene icis-1,2-Dichloroethene Volatile Organics 1,1,2-Trichloroethane 1,1,2-Trichloroethane	Location	2: MW-4 2: 11/01/94 2: 200 U 2: 5.J 2: 000 U 2: 5.J 2: 700 2: 200 U 2: 700 2: 000 U	MW-4 10/23/97 10,000 U 63,000 NA 10 U 440 D 10 U 10 U NA 10 U 10 U NA 10 U	MW-4 02/26/98 10 U 110 NA 10 U NA 10 U 10 U NA 10 U	1.2 U MW-4 07/22/98 2.0 U 27 NA 2.0 U 190 2.0 U NA 2.0 U NA 2.0 U NA 2.0 U NA 2.0 U 1.0 U 1.0 U 1.0 U	6.2 U MW-4 12/16/98 2.0 U 56 NA 2.0 U 140 D 2.0 U NA 2.0 U NA 2.0 U NA 2.0 U NA 3.0 U MW-5 07/16/92	6.8 U MW-4 04/14/99 1.8 U 85 NA 3.0 U 450 3.1 U 2.2 U NA 3.6 U 2.8 U MW-5 11/01/94	8.5 U MW-4 11/14/01 0.20 U 25 NA 0.20 U 1.0 U 0.30 U NA 2.8 0.20 U MW-5 10/22/97	MW-4 12/19/01 0.20 U 8.4 NA 0.20 U 1.0 U 0.30 U 0.30 U 0.30 U MW-5 02/24/98	1.7 U MW-4 10/07/02 0.30 U 2.6 NA 0.20 U 0.90 U 0.10 U NA 0.30 U MW-5 07/22/98	75 U MW-4 03/03/03 0.30 U 32 0.50 U 0.20 U 0.90 U 0.10 U 9.0 0.30 U 9.0 WW-5 12/14/98	2.0 U MW-4 10/09/03 0.30 U 0.90 0.50 U 0.20 U 0.80 U 0.20 U 4.0 1.5 0.20 U MW-5 0.414/99 0.35 U 0.21 U	MW-4 03/18/04 03/18/04 03/18/04 1.9 NA 0.20 U 0.80 U 0.30 U 0.20 U MW-5 03/16/06 0.30 U	5.0 U 5.0 U MW-4 10/11/04 0.30 U 0.70 0.40 U 0.30 U 0.90 U 0.40 U 2.4 2.3 0.20 U MW-5D 12/07/06	1.0 U [1.0 U] MW-6 11/01/94 10 U 30 10 U 1.0 U	NA MW-4 03/22/05 0.30 U 5.5 0.40 U 0.50 U 0.90 U 0.40 U 5.2 2.1 0.20 MW-6 02/24/98	25 U 40 U MW-4 09/22/05 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U 2.1 3.2 0.80 MW-6 07/22/98	MW-4 03/17/06 0.30 U 18 NA 0.50 U 0.50 U 0.40 U 0.40 U NA 1.7 0.30 U MW-6 12/14/98	NA MW-4 06/22/06 0.30 U 26 1.1 0.50 U 0.40 U 6.4 1.5 1.0 MW-6 04/14/99	NA MW-4 05/03/11 1.0 U	MW-4 11/20/14 1.0 U [1.0 U] 0.31 J [0.28 J] 1.0 U [1.0 U] 0.80 J [0.84 J] 0.81 J [0.72 J] 1.0 U [1.0 U] 0.72 J 1.0 U [1.0 U] 0.72 J 1.0 U [1.0 U] 0.72 J 0.7	MW-4 06/04/15 1.0 U 0.27 J 1.0 U 0.94 J 0.76 J 1.0 U MW-6 10/07/02	MW-4 11/16/15 1.0 U 0.35 J 1.0 U 1.0	MW-4 10/04/16 5.0 U 1.0 U NA 1.0 U 5.0 U 1.0 U 0.91 J 1.0 U MW-6 10/09/03	MW-4 10/03/17 1.0 U NA 1.0 U NA 1.0 U NA 1.5 1.0 U NA 0.30 U 0.30 U 4.3	MW-4 11/20/18 1.0 U 1.0
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chioroethane Chioroethane Chioroethane Chioroethane Trichloroethene Trichloroethene Inchioroethene Cod-1,2-Dichloroethane Carbon Deutlide Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane	Location	2: MW-4 2: 11/01/94 2: 200 U 25 J 200 U 25 J 200 U 25 J 200 U 25 J 200 U 100 U 200 U 100 U 200 U 100 U	MW-4 10/23/97 10,000 U 63,000 NA 10 U 440 D 10 U NA 10 U 10 U 10 U 10 U 10 U 10 U 10 U 10 U	MW-4 02/26/98 10 U 110 NA 10 U 490 D 10 U	1.2 U MW-4 07/22/98 2.0 U 27 NA 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 09/14/22 9/14/22	6.2 U MW-4 12/16/98 2.0 U 5.6 NA 2.0 U 14.0 D 2.0 U 2.0 U 2.0 U NA 2.0 U 3.0 U 4.0 D NA 3.0 U NA 3.0 U NA NA NA NA NA NA NA NA NA	6.8 U MW-4 04/14/99 1.8 U 85 NA 3.0 U 450 3.1 U 2.2 U NA 3.6 U MW-5 11/01/94	8.5 U MW-4 11/14/01 0.20 U 25 NA 0.20 U 1.0 U 0.30 U 0.30 U NA 28 0.20 U MW-5 10/12/97	6.8 U MW-4 12/19/01 0.20 U 8.4 NA 0.20 U 1.0 U 0.30 U 0.30 U NA 2.1 0.20 U MW-5 02/24/98	1.7 U MW-4 10/07/02 0.30 U 2.6 NA 0.20 U 0.90 U 0.10 U NA 0.30 U MW-5 07/22/98	75 U MW-4 03/03/03 0.30 U 32 0.50 U 0.20 U 0.20 U 0.20 U 0.30 U	2.0 U MW-4 10/09/03 0.30 U 0.90 0.50 U 0.20 U 0.80 U 0.30 U 0.20 U 4.0 1.5 0.20 U MW-5 04/14/99 0.35 U 0.21 U NA	MW-4 03/18/04 0.30 U 1.9 NA 0.20 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.20 U NA 1.8 0.20 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U NA	MW-4 10/11/04 0.30 U 0.70 0.40 U 0.30 U 0.30 U 0.40 U	1.0 U [1.0 U] MW-6 11/01/94 10 U 30 10 U	NA MW-4 03/22/05 0.30 U 5.5 0.40 U 0.30 U 0.40 U	25 U 40 U MW-4 09/22/05 0.30 U 0.30 U 0.20 U 0.50 U 0.40 U 0.40 U 2.1 3.2 0.80 MW-6 07/22/98 2.0 U 99 NA	MW-4 03/17/06 0.30 U 18 A 0.50 U 0.50 U 0.40 U NA 1.7 0.30 U MW-6 12/14/98	NA MW-4 06/22/06 0.30 U 26 1.1 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.40 U MW-6 04/14/99	NA MW-4 05/03/11 1.0 U	10 U [5.0 U] MW-4 11/20/14 1.0 U [1.0 U] 0.31 J [0.28 J] 1.0 U [1.0 U] 1.0 U [1.0 U	MW-4 06/04/15 1.0 U 0.27 J 1.0 U 0.94 J 1.0 U MW-6 10/07/02 0.30 U 12 NA	MW-4 11/16/15 1.0 U 0.35 J 1.0 U 0.83 J 1.0 U MW-6 03/03/03	MW-4 10/04/16 5.0 U 1.0 U NA 1.0 U 5.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U NA 0.91 J 1.0 U MW-6 10/09/03	MW-4 10/03/17 1.0 U NA 1.0 U NA 1.0 U 03/18/04 03/18/04	MW-4 11/20/18 1.0 U 1.0
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chlorodram Methylene Chloride Tetrachloroethene Trichloroethene icis-1,2-Dichloroethene icis-1,2-Dichloroethene Volatile Organics 1,1,2-Trichloroethane L-2-Dichloroethane Chloroethane Chloroethane Chloroethane Chloroethane	Location	2: MW-4 2: 11/01/94 2: 200 U 2: 5J 2: 000 U 2: 5J 2: 700 2: 200 U 2: 700 2: 000 U 2: 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	MW-4 10/23/97 10,000 U 63,000 NA 10 U 440 D 10 U 10 U NA 10 U	MW-4 02/26/98 10 U 110 NA 10 U 490 D 10 U 10 U NA 10 U NA 10 U NA 10 U 10 U 10 U	1.2 U MW-4 07/22/98 2.0 U 27 NA 2.0 U 190 2.0 U NA 2.0 U 90/14/22 1.0 U 1.0 U 1.0 U 1.0 U	6.2 U MW-4 12/16/88 2.0 U 56 NA 2.0 U 140 D 2.0 U NA 2.0 U 80 70/16/92 NA S.0 U NA NA NA NA	MW-4 04/14/99 1.8 U 85 NA 3.0 U 450 3.1 U 2.2 U NA 3.6 U 2.8 U MW-5 11/01/94	8.5 U MW-4 11/14/01 0.20 U 25 NA 0.20 U 1.0 U 0.30 U 0.30 U NA 2.8 0.20 U MW-5 10/12/97	6.8 U MW-4 12/19/01 0.20 U 8.4 NA 0.20 U 1.0 U 0.30 U 0.30 U NA 2.1 0.20 U MW-5 02/24/98 10 U NA	1.7 U MW-4 1007/02 0.30 U 2.6 NA 0.20 U 0.90 U 0.30 U NA 0.30 U MW-5 07/22/98	75 U MW-4 03/03/03 0.30 U 32 0.50 U 0.20 U 0.20 U 0.90 U 0.10 U 9.0 0.30 U 0.30 U MW-5 12/14/98	2.0 U MW-4 10/09/03 0.30 U 0.90 0.50 U 0.20 U 0.80 U 0.30 U 4.0 1.5 0.20 U MW-5 04/14/99 0.35 U NA	MW-4 03/18/04 0.30 U 1.9 NA 0.20 U 0.30 U 0.30 U 0.30 U 0.20 U NA 0.20 U NA 0.20 U NA 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U NA 0.30 U 0.30 U NA 0.30 U 0.50 U	MW-4 10/11/04 0.30 U 0.70 0.40 U 0.30 U 0.40 U	1.0 U [1.0 U] MW-6 11/01/94 10 U 30 10 U 1.0	NA MW-4 03/22/05 0.30 U 55 0.40 U 0.30 U 5.2 2.1 0.20 U MW-6 02/24/98 10 U 28 NA 10 U	25 U (40 U) MW-4 09/22/05 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.50 U 2.1 2.2 0.80 MW-6 07/22/98 2.0 U 99 NA 2.0 U	MW-4 03/17/06 0.30 U 18 NA 0.50 U 0.50 U 0.40 U NA 1.7 0.30 U MW-6 12/14/98 2.0 U	NA MW-4 06/22/06 0.30 U 26 1.1 0.50 U 0.40 U 0.40 U 0.40 U 6.4 1.5 1.0 MW-6 04/14/99 2.5 130 NA 0.59 U	NA MW-4 05/03/11 1.0 U 1	10 U [5.0 U] MW-4 11/20/14 1.0 U [1.0 U] 3.3 I J [0.28 J] 1.0 U [1.0 U] MW-6 12/19/01 0.20 U NA 0.50	MW-4 06/04/15 1.0 U 0.27 J 1.0 U 0.27 J 1.0 U 1.	MW-4 11/16/15 1.0 U 0.35 J 1.0 U 1.0	MW-4 10/04/16 10/04/16 10/04/16 10/04/16 10/04/16 10/04/16 10/04/16 10/04/16 10/04/16 10/04/16 10/04/16 10/04/16 10/04/16 10/04/16 10/04/16 10/04/16 10/04/16	MW-4 10/03/17 1.0 U NA 1.5 U 1.5 U NA MW-6 03/18/04 0.30 U 4.3 NA	MW-4 11/20/18 1.0 U 1.0
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chloroform Mothylene Chloride Tetrachloroethene Trichloroethene 06-1,2-Dichloroethene Vinyt Chhorde Carbon Deutifde Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chloroform Methylene Chloride	Location Sample Dat	2: MW-4 2: 11/01/94 2: 200 U 25 J 200 U 25 J 200 U 25 J 200 U 25 J 200 U 200 U 200 U 200 U 200 U 100 U 200 U 100 U	MW-4 10/23/97 10,000 U 63,000 NA 10 U 440 D 10 U NA 10 U NA 10 U NA 10 U NA 10 U 10 U NA 10 U	MW-4 02/26/98 10 U 110 NA 10 U 190 D 10 U	1.2 U MW-4 07/2298 2.0 U 27 NA 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 3.0 U 3	6.2 U MW-4 12/16/98 2.0 U 5.6 NA 2.0 U 140 D 2.0 U 2.0 U 2.0 U NA 2.0 U 3.0 U 4.0 U 3.0 U 4.0 U 4.0 U 5.0 U NA NA NA NA NA NA NA NA NA N	6.8 U MW-4 04/14/99 1.8 U 8.5 NA 3.0 U 2.2 U NA 3.6 U 2.8 U MW-5 11/01/94 10 U 10 U 10 U 10 U	8.5 U MW-4 11/14/01 0.20 U 25 NA 0.20 U 1.0 U 0.30 U NA 2.8 0.20 U 0.30 U NA 1.0 U 0.10	6.8 U MW-4 12/19/01 0.20 U 8.4 NA 0.20 U 1.0 U 0.30 U NA 2.1 0.20 U 0.30 U NA 2.1 0.20 U 0.30 U NA 1.0 U 0.30 U 0.	1.7 U MW-4 10/07/02 0.30 U 2.6 NA 0.20 U 0.90 U 0.10 U 0.10 U MW-5 0772298 2.0 U 2.0 U NA	MW-4 03/03/03 0.30 U 32 0.50 U 0.20 U 0.90 U 0.10 U 0.10 U 0.30 U	2.0 U MW-4 10/09/03 0.30 U 0.90 0.50 U 0.20 U 0.80 U 0.20 U 4.0 1.5 0.20 U MW-5 04/14/99 0.35 U 0.21 U NA 0.59 U 0.35 U	MW-4 03/18/04 0.30 U 1.9 NA 0.20 U 0.30 U 0.30 U 0.30 U 0.20 U NA 0.20 U NA 0.20 U NA 0.30 U 0.50 U	MW-4 10/11/04 10/11/04 0.30 U 0.70 0.40 U 0.30 U 0.90 U 0.40 U 0.40 U 2.4 2.3 0.20 U 0.90 U	1.0 U [1.0 U] MW-6 11/01/94 10 U 30 10 U 10 U 10 U 30 J NA 10 U	NA MW-4 03/22/05 0.30 U 5.5 0.40 U 0.30 U 0.40 U 0.40 U 0.40 U 0.20 U MW-6 02/24/98 10 U 28 NA 10 U 10 U 10 U	25 U [40 U] MW-4 09/2205 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.40 U 2.1 3.2 0.80 MW-6 07/2298 2.0 U 99 NA 2.0 U	MW-4 03/17/06 0.30 U 18 NA 0.50 U 0.50 U 0.40 U NA 1.7 0.30 U MW-6 12/14/98 2.0 U 100 NA	MW-4 06/22/06 0.30 U 26 1.1 0.50 U 0.50 U 0.50 U 0.40 U 0.	MW-4 05/03/11 1.0 U 1.0	10 U [5.0 U] MW-4 11/20/14 10.U [1.0 U] 0.03 1 [0.28] 10.U [1.0 U]	MW-4 06/04/15 1.0 U 0.27 J 1.0 U 0.30 U 1.0 U 0.30 U 1.0 U 0.30 U 0.50 U	MW-4 11/16/15 1.0 U 0.35 J 1.0 U 0.83 U 0.40 U 0.30 U	MW-4 10/04/16 5.0 U 1.0 U NA 1.0 U 5.0 U 1.0 U 1.0 U NA 1.0 U 1.0 U NA 0.91 J 1.0 U MW-6 10/09/03 0.30 U 0.50 0.50 U 0.50 0.80 U 0.50	MW-4 10/03/17 1.0 U NA 1.0 U 0.30 U 4.3 NA 0.40 0.80 U 0.80 U	MW-4 11/20/18 1.0 U 1.0
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane Chlorodhane Chlorodhane Chlorodorm Methylene Chloride Tetrachloroethene Trichloroethene icis-1,2-Dichloroethene icis-1,2-Dichloroethene Volatile Organics 1,1,2-Trichloroethane L-2-Dichloroethane Chloroethane	Location	2: MW-4 2: 11/01/94 2: 200 U 2: 5J 2: 000 U 2: 5J 2: 700 2: 000 U 2: 700 2: 000 U 2:	MW-4 10/23/97 10,000 U 63,000 NA 10 U 440 D 10 U 10 U NA 10 U	MW-4 02/26/98 10 U 110 NA 10 U 10 U 10 U NA 10 U 10 U NA 10 U	1.2 U MW-4 0772298 2.0 U 27 NA 2.0 U 190 2.0 U NA 2.0 U NA 2.0 U 10 U 10 U 1.0 U	6.2 U MW-4 12/16/88 2.0 U 5.6 NA 2.0 U 140 D 2.0 U 2.0 U 2.0 U 2.0 U 3.0 NW-5 07/16/92 NA 5.0 U NA 4.9 JB NA	MW-4 04/14/99 1.8 U 85 NA 3.0 U 450 450 3.8 U 2.2 U NA 3.6 U 11/01/94 10 U 10 U 10 U 10 U 10 U	8.5 U MW-4 11/14/01 0 20 U 25 NA 0.20 U 1.0 U 0.30 U NA 2.8 0.20 U MW-5 10/22/97 10 U NA 10.00 U NA 10.00 U NA	6.8 U MW-4 12/19/01 0.20 U 8.4 NA 0.20 U 1.0 U 0.30 U 0.30 U NA 2.1 0.20 U MW-5 02/24/98 10 U NA 10 U NA 10 U NA 10 U NA	1.7 U MW-4 10/07/02 0.30 U 2.6 NA 0.20 U 0.90 U 0.10 U NA 0.30 U XM-5 07/22/98 2.0 U NA 2.0 U NA 2.0 U 0.30 U 0.30 U	MW-4 03/03/03 0.30 U 32 0.50 U 0.20 U 0.90 U 0.10 U 0.30 U	0.30 U 0.90 U 0.	MW-4 03/18/04 0.30 U 1.9 NA 0.20 U 0.30 U 0.30 U 0.30 U 0.20 U NA 0.20 U NA 0.20 U NA 0.30 U NA 0.50 U 0.50 U 0.50 U 0.50 U 0.50 U	MW-4 10/11/04 10/11/04 0.30 U 0.70 0.40 U 0.30 U 0.90 U 0.40 U 0.40 U 2.4 2.3 0.20 U MW-5D 12/07/06 0.30 U 0.40 U	1.0 U [1.0 U] MW-6 11/01/94 10 U 30 10 U 1.0 J 10 U 3.0 J NA 10 U MW-6 10/24/97 10 U 62 NA 10 U 10 U	NA MW-4 03/22/05 0.30 U 55 0.40 U 0.30 U 5.2 2.1 0.20 U MW-6 02/24/98 10 U 10 U 10 U	28 U [40 U] MW-4 0972205 0.30 U 0.30 U 0.50 U 0.50 U 0.40 U 2.1 3.2 0.80 MW-6 0772298 2.0 U 9.9 NA 2.0 U 5.0 U	MW-4 03/17/06 0.30 U 18 18 0.50 U 0.50 U 0.40 U 0.40 U NA 12/14/98 12/14/98 2.0 U 0.0 U NA 1.0 0.50 U	NA MW-4 06/22/06 0.30 U 26 1.1 0.50 U 0.40 U 0.40 U 0.40 U 6.4 1.5 1.0 MW-6 04/14/99 2.5 130 NA 0.59 U 1.1 U 0.59 U	NA MW-4 05/03/11 1.0 U 1	10 U [5.0 U] MW-4 11/20/14 1.0 U [1.0 U] 0.31 J [0.28 J] 1.0 U [1.0 U] MW-6 12/19/01 0.20 U NA 0.50 0.30 U	MW-4 06/04/15 1.0 U 02/7 J 1.0 U 1.0	MW-4 11/16/15 1.0 U 0.35 J 1.0 U 0.83 J 1.0 U MW-6 03/03/03	MW-4 10/04/16 5.0 U 1.0	MW-4 1003/17 1.0 U NA 1.0 U 1.5 U 1.5 U 1.5 U 1.5 U 1.5 U NA MW-6 03/18/04 4.3 NA 0.40 0.80 U 0.80 U 0.30 U	MW-4 11/20/18 1.0 U 1.0
Volatile Organics 1.1.2-Trichloroethane 1.2-Dichloroethane 1.2-Dichloroethane Chloroform Methylene Chloride Tetrachloroethene Ges.1.2-Dichloroethene Ges.1.2-Dichloroethene Carbon Disulfide Volatile Organics 1.3.2-Trichloroethane 1.2-Dichloroethane Chloroform Methylene Chloride Carbon Disulfide	Location Sample Dat	2: MW-4 2: 11/01/94 2: 200 U 25 J 200 U 25 J 200 U 25 J 200 U 25 J 200 U 200 U 200 U 200 U NA 200 U 200 U 1.0 U 200 U 1.0 U	MW-4 10/23/97 10,000 U 63,000 NA 10 U 440 D 10 U NA 10 U NA 10 U NA 10 U	MW-4 02/26/98 10 U 110 NA 10 U 10 U 10 U NA	1.2 U MW-4 07/2298 2.0 U 2.7 NA 2.0 U 2.0 U 2.0 U 3.0 U 4.0 U 5.0 U	6.2 U MW-4 12/16/98 2.0 U 5.6 NA 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 3.0 U 3.0 U 3.0 U 3.0 U 3.0 U 3.0 U 4.0 U 4.0 U 4.0 U 5.0 U NA NA NA NA	6.8 U MW-4 04/14/99 1.8 U 8.5 NA 3.0 U 2.2 U NA 3.6 U 2.8 U 11/01/94 11/01/94 10 U 10 U 10 U 10 U 10 U 10 U 10 U	8.5 U MW-4 11/14/01 0.20 U 25 NA 0.20 U 1.0 U 0.30 U NA 2.8 0.20 U 10 U	6.8 U MW-4 12/19/01 0.20 U 8.4 NA 0.20 U 1.0 U 0.30 U 0.30 U 0.30 U 0.30 U 0.4 NA	1.7 U MW-4 10/07/02 0.30 U 2.6 NA 0.20 U 0.90 U 0.10 U NA 0.30 U 0.40 U 0.50 U	75 U MW-4 03/03/03 0.30 U 2.0 0.50 U 0.20 U 0.90 U 0.10 U 0.10 U 0.30 U	0.30 U 0.	MW-4 03/18/04 03/18/04 03/18/04 03.0 U 1.9 0.80 U 0	MW-4 10/11/04 10/11/04 0.30 U 0.70 0.40 U 0.30 U 0.90 U 0.40 U	1.0 U [1.0 U] MW-6 11/01/94 10 U 30 10 U 10 U 30 J 10 U 30 J 10 U	NA MW-4 03/22/05 0.30 U 5.5 0.40 U 0.30 U 0.40	25 U [40 U] MW-4 09/2205 0.30 U 0.30 U 0.20 U 0.20 U 0.40 U 0.	MW-4 0317706 0.30 U 18 18 0.50 U 0.50 U 0.40 U 0.40 U NA 17 0.30 U MW-6 12/14/98 2.0 U 100 NA 2.0 U 3.0 U 3.0 U 3.0 U 3.0 U 3.0 U 3.0 U 4.0 U 4.0 U 5.0 U 5.0 U 5.0 U 7.0 U 7.	MW-4 06/22/06 0.30 U 26 1.1 0.50 U 0.50 U 0.50 U 0.50 U 0.40 U 0.	MW-4 05/03/11 1.0 U 1.0	10 U [5.0 U] MW-4 11/20/14 10 U [1.0 U] 0.03 1 [0.28] 10 U [1.0 U]	MW-4 06/04/15 1.0 U 0.27 J 1.0 U 0.94 J 0.76 J 1.0 U 0.94 J 0.95 U 0.20 U 0.20 U 0.20 U 0.20 U	MW-4 11/16/15 1.0 U 0.35 J 1.0 U 0.85 J 1.0 U 0.80 J 0.80 U 0.40 U 0.50 U 0.50 U 0.50 U 0.20 U 0.20 U 0.10 U	MW-4 10/04/16 5.0 U 1.0 U 1.0 U NA 1.0 U 5.0 U 1.0 U NA 0.91 J 1.0 U NA 0.91 J 0.50 U	MW-4 10/03/17 1.0 U NA 1.0 U 1.0 U NA 0.40 0.30 U 4.3 NA 0.40 0.80 U 0.30 U 1.1	MW-4 11/20/18 1.0 U 1.0
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane Chloroethane Chloroethane Chloroethane Chloroethene Cis-1,2-Dichloroethene cis-1,2-Dichloroethene Cis-1,2-Dichloroethene Carbon Disulfide Volatile Organics 1,1,2-Trichloroethane 1,1,2-Trichloroethane Chloroethane Chloroethane Chloroethane Chloroethane Chloroethane Tichloroethene Tichloroethene Tichloroethene Tichloroethene	Location	2: MW-4 2: 11/01/94 2: 200 U 2: 5J 2: 000 U 2: 5J 2: 700 2: 000 U 2: 700 2: 000 U 2:	MW-4 10/23/97 10,000 U 63,000 NA 10 U 440 D 10 U	MW-4 02/26/98 10 U 110 NA 10 U 10 U 10 U NA	1.2 U MW-4 0772298 2.0 U 27 NA 2.0 U 190 2.0 U NA 2.0 U 100 100 100 100 100 100 100	6.2 U MW-4 12/16/88 2.0 U 56 NA 2.0 U 140 D 2.0 U NA 2.0 U NA 2.0 U NA 2.0 U NA 4.9 JB NA NA NA NA	MW-4 04/14/99 1.8 U 85 NA 3.0 U 450 450 1.10 1/94 1.10 1/94 1.10 U 10 U	8.5 U MW-4 11/14/01 0.20 U 25 NA 0.20 U 1,0 U 0.30 U NA 2.8 0.20 U MW-5 10/22/97 10 U 10 U NA 10,000 U 10,000 U 10,000 U 10,000 U NA	6.8 U MW-4 12/19/01 0.20 U 8.4 NA 0.20 U 1.0 U 0.30 U NA 2.1 0.20 U MW-5 02/24/98 10 U 10 U NA	1.7 U MW-4 10/07/02 0.30 U 2.6 NA 0.20 U 0.90 U 0.10 U 0.30 U	MW-4 03/03/03 0.30 U 32 0.50 U 0.20 U 0.90 U 0.10 U 0.30 U	MW-4 10/09/03 0.30 U 0.90 0.50 U 0.20 U 0.80 U 0.20 U 0.20 U 4.0 1.5 0.20 U MW-5 04/14/99 0.35 U 0.21 U NA 0.59 U 0.59 U 0.44 U 0.44 U	MW-4 03/18/04 03/18/04 03/18/04 03/0 U 1.9 NA 0.20 U 0.80 U 0.20 U 0.30 U 0.20 U MW-5 03/16/06 030 U 0.30 U 0.40 U 0.40 U 0.40 U	5.0 U [5.0 U] MW-4 10/1/04 10/1/04 0.30 U 0.70 0.40 U 0.30 U 0.90 U 0.40 U 2.4 2.3 0.20 U MW-5D 1207/06 0.20 U 0.40 U	1.0 U [1.0 U] MW-6 11/01/94 10 U 30 10 U 1.0 J 10 U 3.0 J NA 10 U MW-6 10/24/97 10 U 6 Q NA 10 U 10 U 7.0 J NA	NA MW-4 03/22/05 0.30 U 5.5 0.40 U 0.30 U 0.40 U 0	28 U (40 U) MW-4 0972205 0.30 U 0.30 U 0.20 U 0.50 U 0.40 U 2.1 3.2 0.80 MW-6 0772298 2.0 U 9.0 U 2.0 U 2.0 U 2.0 U 2.0 U 3.1 U 3.2 U 3.2 U 4.4 U 4.4 U 4.4 U 5.5 U	MW-4 03/17/06 0.30 U 18 N 0.50 U 0.50 U 0.40 U 0.40 U NA 1.7 0.30 U MW-6 12/14/98 2.0 U 100 NA 2.0 U 17 NA	NA MW-4 06/22/06 0.30 U 26 1.1 0.50 U 0.50 U 0.50 U 0.40 U	MW-4 05/03/11 1.0 U 1.0	10 U [5.0 U] MW-4 11/20/14 11	MW-4 06/04/15 1.0 U 0.27 J 1.0 U 1.0	MW-4 11/16/15 1.0 U 0.35 J 1.0 U 0.83 J 1.0 U MW-6 03/03/03 0.30 U 0.40 U 0.50 U 0.90 U 0.10 U 0.30 U	MW-4 1004/16 5.0 U 1.0 U NA 1.0 U 5.0 U 1.0 U NA 1.0 U 1.0 U NA 0.91 J 1.0 U MW-6 1009/03 0.30 U 0.50 U 0.50 U 0.50 U 0.20 U 0.20 U	MW-4 1003/17 1.0 U NA 1.0 U NA 1.5 1.0 U NA MW-6 03/18/04 0.30 U 4.3 NA 0.40 0.80 U 0.30 U 1.1 NA	MW-4 11/20/18 1.0 U 1.0
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chloroform Methylene Chloride Tetrachloroethene Tetrachloroethene Tetrachloroethene Cest-1,2-Dichloroethene Virty Chloroethene Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane Chloroethane Chloroform Methylene Chloride Tetrachloroethene Trichloroethene Trichloroethene Trichloroethene	Location Sample Dat	2: MW-4 2: 11/01/94 2: 200 U 25 J 200 U 25 J 200 U 25 J 200 U 25 J 200 U 200 U 200 U 200 U NA 200 U 200 U 1.0 U 200 U 1.0 U	MW-4 10/23/97 10,000 U 63,000 NA 10 U 440 D 10 U NA 10 U NA 10 U NA 10 U	MW-4 02/26/98 10 U 110 NA 10 U 10 U 10 U NA	1.2 U MW-4 07/2298 2.0 U 2.7 NA 2.0 U 2.0 U 2.0 U 3.0 U 4.0 U 5.0 U	6.2 U MW-4 12/16/98 2.0 U 5.6 NA 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 3.0 U 3.0 U 3.0 U 3.0 U 3.0 U 3.0 U 4.0 U 4.0 U 4.0 U 5.0 U NA NA NA NA	6.8 U MW-4 04/14/99 1.8 U 8.5 NA 3.0 U 2.2 U NA 3.6 U 2.8 U 11/01/94 11/01/94 10 U 10 U 10 U 10 U 10 U 10 U 10 U	8.5 U MW-4 11/14/01 0.20 U 25 NA 0.20 U 1.0 U 0.30 U NA 2.8 0.20 U 10 U 10 U NA 10/22/97 10 U 10 U 10 U 10 00 U 10.000 U 10.000 U	6.8 U MW-4 12/19/01 0.20 U 8.4 NA 0.20 U 1.0 U 0.30 U 0.30 U 0.30 U 0.30 U 0.4 NA	1.7 U MW-4 10/07/02 0.30 U 2.6 NA 0.20 U 0.90 U 0.10 U NA 0.30 U 0.30 U 0.40 U 0.50 U	75 U MW-4 03/03/03 0.30 U 2.0 0.50 U 0.20 U 0.90 U 0.10 U 0.10 U 0.30 U	0.30 U 0.	MW-4 03/18/04 03/18/04 03/18/04 03.0 U 1.9 0.80 U 0	MW-4 10/11/04 10/11/04 0.30 U 0.70 0.40 U 0.30 U 0.90 U 0.40 U	1.0 U [1.0 U] MW-6 11/01/94 10 U 30 10 U 10 U 30 J 10 U 30 J NA 10 U 70 J	NA MW-4 03/22/05 0.30 U 5.5 0.40 U 0.30 U 0.40	25 U [40 U] MW-4 09/2205 0.30 U 0.30 U 0.20 U 0.20 U 0.40 U 0.	MW-4 0317706 0.30 U 18 18 0.50 U 0.50 U 0.40 U 0.40 U NA 17 0.30 U MW-6 12/14/98 2.0 U 100 NA 2.0 U 3.0 U 3.0 U 3.0 U 3.0 U 3.0 U 3.0 U 4.0 U 4.0 U 5.0 U 5.0 U 5.0 U 7.0 U 7.	MW-4 06/22/06 0.30 U 26 1.1 0.50 U 0.50 U 0.50 U 0.50 U 0.40 U 0.	MW-4 05/03/11 1.0 U 1.0	10 U [5.0 U] MW-4 11/20/14 10 U [1.0 U] 0.03 1 [0.28] 10 U [1.0 U]	MW-4 06/04/15 1.0 U 0.27 J 1.0 U 0.94 J 0.76 J 1.0 U 0.94 J 0.95 U 0.20 U 0.20 U 0.20 U 0.20 U	MW-4 11/16/15 1.0 U 0.35 J 1.0 U 0.85 J 1.0 U 0.80 J 0.80 U 0.40 U 0.50 U 0.50 U 0.50 U 0.20 U 0.20 U 0.10 U	MW-4 10/04/16 5.0 U 1.0 U 1.0 U NA 1.0 U 5.0 U 1.0 U NA 0.91 J 1.0 U NA 0.91 J 0.50 U	MW-4 10/03/17 1.0 U NA 1.0 U 1.0 U NA 0.40 0.30 U 4.3 NA 0.40 0.80 U 0.30 U 1.1	MW-4 11/20/18 1.0 U 1.0



	1	Location ID:	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6D	MW-6D	MW-6D	MW-6I	MW-6I	MW-6I	MW-6I	MW-6I
	s	ample Date:	03/22/05	09/22/05	03/17/06	06/22/06	05/03/11	11/20/14	06/04/15	11/16/15	10/04/16	10/03/17	11/20/18	09/20/19	12/07/06	01/03/08	05/03/11	12/07/06	05/03/11	11/20/14	06/04/15	11/16/15
Volatile Organics	CAO Goal ¹	Units																				
1,1,2-Trichloroethane	5	ug/L	0.30 U	0.30 U	0.30 U	0.30 U	1.0 U		1.0 U [1.0 U]	1.0 U [1.0 U]	5.0 U	1.0 U	1.0 U [1.0 U]	1.0 U [1.0 U]	0.50	0.20 U	50 U	22 U	100 U	1.5 J	130 U	1.9 J
1,2-Dichloroethane	5	ug/L	0.40 U	0.30 U	0.40	0.30 U	1.0 U	1.0 U [1.0 U]		1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 UJ [1.0 UJ]	170	20	700	9,000	2,900	1,700	2,200	1,200
Chloroethane		ug/L	0.40 U	0.20 U	NA .	0.20 U	1.0 U	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U [1.0 U]	NA	1.0 U	1.0 U [1.0 U]	1.0 U [1.0 U]	0.40 U	0.40 U	50 U	43 U	100 U	5.0 U	130 U	10 U
Chloroform Methylene Chloride	0.19	ug/L	0.30 U 0.90 U	0.50 U 0.50 U	0.50 U 0.50 U	0.50 U 0.50 U	1.0 U	1.0 U [0.13 J]	1.0 U [1.0 U]	1.0 U [1.0 U] 1.0 U [1.0 U]	1.0 U 5.0 U	1.0 U 1.0 U	1.0 U [1.0 U]	1.0 U [1.0 U]	0.20 U 0.40 U	0.20 U 0.40 U	50 U	20 U 40 U	100 U	5.0 U	130 U 130 U	10 U
Tetrachloroethene	5	ug/L ug/L	0.40 U	0.40 U	0.30 U	0.30 U	1.0 U	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U	NA	1.00 [1.00]	NA	0.40 U	0.40 U	50 U	40 U	100 U	5.0 U	130 U	10 U
Trichloroethene	5	ug/L	0.40 U	0.40 U	0.40 U	0.40 U	1.0 U	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U [1.0 U]	6.2	1.2	15 J	36 U	20 J	13	24 J	13
cis-1.2-Dichloroethene		ug/L	0.40 U	0.40 U	NA NA	0.40 U	1.0 U	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U [1.0 U]	NA.	1.0 U	1.0 U [1.0 U]	1.0 U [1.0 U]	0.90	0.40	50 U	28 U	100 U	6.7	130 U	6.4 J
Vinyl Chloride	2	ug/L	0.40 U	0.30 U	0.30 U	0.30 U	1.0 U	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U [1.0 U]	0.60	0.20 U	50 U	95	100 U	7.7	130 U	6.0 J
Carbon Disulfide	1000	ug/L	0.20 U	0.30 U	0.30 U	0.30 U	1.0 U	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U	NA	1.0 U [1.0 U]	NA	0.40 U	0.40 U	50 U	44 U	100 U	5.0 U	130 U	10 U
		Location ID:	MW-6I	MW6I	MW-6I	MW-6I	MW-6I	MW-6I	MW-6I	MW-6I	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-8D	MW-8D	MW-8D-DL	MW-8D	MW-8D	MW-8D
		ample Date:	01/03/08	10/04/16	10/02/17	11/20/18	09/20/19	10/08/20	09/14/21	09/14/22	11/01/94	10/21/97	02/23/98	07/20/98	12/15/98	04/14/99	11/01/94	05/28/96	05/28/96	10/20/97	02/24/98	07/23/98
Volatile Organics	CAO Goal ¹	Units	01/03/08	10/04/16	10/02/17	11/20/18	09/20/19	10/08/20	09/14/21	09/14/22	11/01/94	10/21/97	02/23/98	07/20/98	12/15/98	04/14/99	11/01/94	05/28/96	05/28/96	10/20/97	02/24/98	07/23/98
1.1.2-Trichloroethane	CAO Goal	ug/L	5.5 U	100 U [100 U]	2.7 [50 U]	100 U	100 U	10 U	2.0 U	5.0 U	10 U	10 U	10 U	2.0 U	2.0 U	0.35 U	20 U	5.0 U	250 U	10 U	10 U	2.0 U
1.2-Dichloroethane	5	ug/L	3.900	2.600 [2.400]	2.700 D [2.700	2.400	2500	2.100 D	52	510 D	10 U	10 U	10 U	2.0 U	2.0 U	0.33 U	270	2.800 E	2.800 D	350 D	11	120
Chloroethane		ug/L	11 U	NA	1.0 U [50 U]	100 U	100 U	100 U	NA.	5.0 U	10 U	NA NA	NA NA	NA.	NA.	NA NA	20 U	10 U	500 U	NA NA	NA NA	NA NA
Chloroform	0.19	ug/L	5.0 U	20 U [20 U]	1.0 U [50 U]	100 U	100 U	10 U	2.0 U	5.0 U	10 U	10 U	10 U	2.0 U	2.0 U	0.59 U	20 U	5.0 U	250 U	10 U	10 U	2.0 U
Methylene Chloride	5	ug/L	10 U	100 U [100 U]	1.0 U [50 UB]	100 U	100 U	10 U	2.0 U	5.0 U	10 U	10 U	10 U	4.0 J	5.0 U	1.1 U	20 U	5.0 U	250 U	10 U	10 U	4.0 J
Tetrachloroethene	5	ug/L	10 U	20 U [20 U]	NA	100 U	NA	10 U	NA	5.0 U	10 U	10 U	10 U	2.0 U	2.0 U	0.62 U	20 U	NA	250 U	10 U	10 U	2.0 U
Trichloroethene	5	ug/L	27	27 [23]	27 [50 U]	100 U	100 U	20	3.5	9.7	1.0 J	10 U	10 U	2.0 U	2.0 U	0.44 U	20 U	5.0 U	250 U	10 U	4.0 J	2.0 U
cis-1,2-Dichloroethene		ug/L	15	NA	14 [50 U]	100 U	100 U	12	NA	3.7 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl Chloride	2	ug/L	16	20 U [14 J]	15 [50 U]	100 U	100 U	10 U	2.0 U	5.0 U	10 U	10 U	10 U	2.0 U	2.0 U	0.71 U	20 U	10 U	500 U	10 U	10 U	2.0 U
Carbon Disulfide	1000	ug/L	11 U	20 U [20 U]	NA	100 U	NA	NA	NA	5.0 U	30	10 U	10 U	2.0 U	2.0 U	0.56 U	20 U	5.0 U	250 U	10 U	10 U	2.0 U
-																						
		ocation ID:	MW eD	MW OD	MW OD	MW OD	MW OD	MW OD	MIM OD	MW OD	MW OD	MW eD	MW OD	MANA OD	MIM OD	MW OD	MW OD	MW OD	MW OD	MW OD	MW OD	MW OD
		Location ID:	MW-8D	MW-8D	MW-8D	MW-8D	MW-8D	MW-8D	MW-8D	MW-8D	MW-8D	MW-8D	MW-8D	MW-8D	MW-8D	MW-8D	MW-8D	MW-8D	MW-8D	MW-8D	MW-8D	MW-8D
Volatile Organics	s	ample Date:	MW-8D 12/14/98	MW-8D 04/14/99	MW-8D 11/14/01	MW-8D 12/19/01	MW-8D 10/07/02	MW-8D 03/03/03	MW-8D 10/09/03	MW-8D 03/18/04	MW-8D 10/11/04	MW-8D 03/03/03	MW-8D 10/09/03	MW-8D 03/18/04	MW-8D 10/11/04	MW-8D 03/22/05	MW-8D 09/23/05	MW-8D 03/17/06	MW-8D 06/22/06	MW-8D 05/02/11	MW-8D 11/20/14	MW-8D 06/04/15
Volatile Organics		ample Date: Units	12/14/98	04/14/99	11/14/01	12/19/01	10/07/02	03/03/03	10/09/03	03/18/04	10/11/04	03/03/03	10/09/03	03/18/04	10/11/04	03/22/05	09/23/05	03/17/06	06/22/06	05/02/11	11/20/14	06/04/15
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane	s	ample Date:		-			-		-										-			
1,1,2-Trichloroethane	CAO Goal ¹	ample Date: Units ug/L	12/14/98 2.0 U	04/14/99 0.35 U	11/14/01 0.20 U	12/19/01 0.20 U	10/07/02 0.30 U	03/03/03 0.30 U	10/09/03 0.30 U	03/18/04 0.30 U	10/11/04 0.30 U	03/03/03 0.30 U	10/09/03 0.30 U	03/18/04 0.30 U	10/11/04 0.30 U	03/22/05 0.30 U	09/23/05 0.30 U	03/17/06 0.30 U	06/22/06 0.30 U	05/02/11 1.0 U	11/20/14 1.0 U	06/04/15 1.0 U
1,1,2-Trichloroethane 1,2-Dichloroethane	CAO Goal ¹ 5 5	ug/L	12/14/98 2.0 U 5.0	04/14/99 0.35 U 130	11/14/01 0.20 U 110	12/19/01 0.20 U 7.8	10/07/02 0.30 U 16	03/03/03 0.30 U 0.40 U	0.30 U 3.7	03/18/04 0.30 U 0.30 U	0.30 U 1.0	03/03/03 0.30 U 0.40 U	10/09/03 0.30 U 3.7	03/18/04 0.30 U 0.30 U	0.30 U 1.0	03/22/05 0.30 U 0.40 U	09/23/05 0.30 U 0.30 U	03/17/06 0.30 U 0.30 U	06/22/06 0.30 U 0.30 U	05/02/11 1.0 U 1.0 U	11/20/14 1.0 U 1.0 U	06/04/15 1.0 U 1.0 U
1,1,2-Trichloroethane 1,2-Dichloroethane Chloroethane Chloroform Methylene Chloride	S CAO Goal ¹ 5 5 5 0.19 5	ug/L ug/L ug/L ug/L ug/L ug/L ug/L	2.0 U 5.0 NA 2.0 U 5.0 U	04/14/99 0.35 U 130 NA 0.59 U 1.1 U	0.20 U 110 NA 0.20 U 1.0 U	0.20 U 7.8 NA 0.20 U 1.0 U	10/07/02 0.30 U 16 NA 0.20 U 0.90 U	03/03/03 0.30 U 0.40 U 0.50 U 0.20 U 0.90 U	0.30 U 3.7 0.50 U 0.20 U 0.80 U	03/18/04 0.30 U 0.30 U NA 0.20 U 0.80 U	0.30 U 1.0 0.40 U 0.30 U 0.90 U	0.30 U 0.40 U 0.50 U 0.20 U 0.90 U	0.30 U 3.7 0.50 U 0.20 U 0.80 U	03/18/04 0.30 U 0.30 U NA 0.20 U 0.80 U	0.30 U 1.0 0.40 U 0.30 U 0.90 U	03/22/05 0.30 U 0.40 U 0.40 U 0.30 U 0.90 U	09/23/05 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U	0.30 U 0.30 U 0.30 U NA 0.50 U 0.50 U	0.30 U 0.30 U 0.30 U 0.20 U 0.50 U	1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	11/20/14 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U
1,1,2-Trichloroethane 1,2-Dichloroethane Chloroethane Chloroform Methylene Chloride Tetrachloroethene	S CAO Goal ¹ 5 5 0.19 5 5	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	2.0 U 5.0 NA 2.0 U 5.0 U 2.0 U 2.0 U	04/14/99 0.35 U 130 NA 0.59 U 1.1 U 0.62 U	0.20 U 110 NA 0.20 U 1.0 U 0.30 U	0.20 U 7.8 NA 0.20 U 1.0 U 0.30 U	0.30 U 16 NA 0.20 U 0.90 U 0.20 U	03/03/03 0.30 U 0.40 U 0.50 U 0.20 U 0.90 U 0.20 U	0.30 U 3.7 0.50 U 0.20 U 0.80 U 0.30 U	03/18/04 0.30 U 0.30 U NA 0.20 U 0.80 U 0.30 U	0.30 U 1.0 0.40 U 0.30 U 0.30 U 0.90 U 0.40 U	03/03/03 0.30 U 0.40 U 0.50 U 0.20 U 0.90 U 0.20 U	0.30 U 3.7 0.50 U 0.20 U 0.80 U 0.30 U	03/18/04 0.30 U 0.30 U NA 0.20 U 0.80 U 0.30 U	0.30 U 1.0 0.40 U 0.30 U 0.90 U 0.40 U	03/22/05 0.30 U 0.40 U 0.40 U 0.30 U 0.90 U 0.40 U	09/23/05 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U	03/17/06 0.30 U 0.30 U NA 0.50 U 0.50 U 0.40 U	06/22/06 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U	1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	11/20/14 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U
1,1,2-Trichloroethane 1,2-Dichloroethane Chloroethane Chloroform Methylene Chloride Tetrachloroethene Trichloroethene	S CAO Goal ¹ 5 5 5 0.19 5 5 5 5 5 5 5 5 5 5 5 5 6 7 7 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	2.0 U 5.0 NA 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U	04/14/99 0.35 U 130 NA 0.59 U 1.1 U 0.62 U 0.44 U	0.20 U 110 NA 0.20 U 1.0 U 1.0 U 0.30 U 0.30 U	0.20 U 7.8 NA 0.20 U 1.0 U 0.30 U 0.30 U	0.30 U 16 NA 0.20 U 0.90 U 0.20 U 0.10 U	03/03/03 0.30 U 0.40 U 0.50 U 0.20 U 0.90 U 0.20 U 0.10 U	0.30 U 3.7 0.50 U 0.20 U 0.80 U 0.30 U	03/18/04 0.30 U 0.30 U NA 0.20 U 0.80 U 0.30 U 0.20 U	0.30 U 1.0 0.40 U 0.30 U 0.30 U 0.90 U 0.40 U 0.40 U	03/03/03 0.30 U 0.40 U 0.50 U 0.20 U 0.90 U 0.20 U 0.10 U	0.30 U 3.7 0.50 U 0.20 U 0.80 U 0.30 U	03/18/04 0.30 U 0.30 U NA 0.20 U 0.80 U 0.30 U	0.30 U 1.0 0.40 U 0.30 U 0.90 U 0.40 U 0.40 U	03/22/05 0.30 U 0.40 U 0.40 U 0.30 U 0.90 U 0.40 U 0.40 U	09/23/05 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U	03/17/06 0.30 U 0.30 U NA 0.50 U 0.40 U 0.40 U	06/22/06 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U	1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	11/20/14 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U
1,1,2-Trichloroethane 1,2-Dichloroethane Chloroethane Chloroform Methylene Chloride Tetrachloroethene Trichloroethene is-1,2-Dichloroethene	S CAO Goal ¹ 5 5 0.19 5 5	ample Date: Units ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	2.0 U 5.0 NA 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U NA	04/14/99 0.35 U 130 NA 0.59 U 1.1 U 0.62 U 0.44 U NA	0.20 U 110 NA 0.20 U 1.0 U 0.30 U 0.30 U NA	12/19/01 0.20 U 7.8 NA 0.20 U 1.0 U 0.30 U 0.30 U NA	10/07/02 0.30 U 16 NA 0.20 U 0.90 U 0.20 U 0.20 U 0.10 U NA	03/03/03 0.30 U 0.40 U 0.50 U 0.20 U 0.90 U 0.20 U 0.10 U 0.30 U	0.30 U 3.7 0.50 U 0.20 U 0.80 U 0.30 U 0.20 U	03/18/04 0.30 U 0.30 U NA 0.20 U 0.80 U 0.30 U 0.20 U NA	0.30 U 1.0 0.40 U 0.30 U 0.90 U 0.40 U 0.40 U	03/03/03 0.30 U 0.40 U 0.50 U 0.20 U 0.90 U 0.20 U 0.10 U 0.30 U	0.30 U 3.7 0.50 U 0.20 U 0.80 U 0.30 U 0.20 U 0.20 U	03/18/04 0.30 U 0.30 U NA 0.20 U 0.80 U 0.30 U 0.20 U NA	10/11/04 0.30 U 1.0 0.40 U 0.30 U 0.90 U 0.40 U 0.40 U 0.40 U	03/22/05 0.30 U 0.40 U 0.40 U 0.30 U 0.90 U 0.40 U 0.40 U 0.40 U	09/23/05 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U	03/17/06 0.30 U 0.30 U NA 0.50 U 0.50 U 0.40 U 0.40 U	06/22/06 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U	1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	11/20/14 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U
1,1,2-Trichloroethane 1,2-Dichloroethane Chloroethane Chloroform Methylene Chloride Tetrachloroethene Trichloroethene Cis-1,2-Dichloroethene Vinyl Chloride	S CAO Goal ¹ 5 5 5 0.19 5 5 5 2	up/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug	2.0 U 5.0 NA 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U	04/14/99 0.35 U 130 NA 0.59 U 1.1 U 0.62 U 0.44 U NA 0.71 U	0.20 U 110 NA 0.20 U 1.0 U 0.30 U 0.30 U NA 0.20 U	12/19/01 0.20 U 7.8 NA 0.20 U 1.0 U 0.30 U 0.30 U NA 0.20 U	0.30 U 16 NA 0.20 U 0.90 U 0.20 U 0.10 U NA 0.30 U	03/03/03 0.30 U 0.40 U 0.50 U 0.20 U 0.90 U 0.20 U 0.10 U 0.30 U	0.30 U 3.7 0.50 U 0.20 U 0.80 U 0.30 U 0.20 U 0.20 U 0.50 U	03/18/04 0.30 U 0.30 U NA 0.20 U 0.80 U 0.30 U 0.20 U 0.20 U NA 0.50 U	0.30 U 1.0 0.40 U 0.30 U 0.30 U 0.90 U 0.40 U 0.40 U 0.40 U	03/03/03 0.30 U 0.40 U 0.50 U 0.20 U 0.90 U 0.10 U 0.30 U 0.30 U	0.30 U 3.7 0.50 U 0.20 U 0.80 U 0.30 U 0.20 U 0.20 U 0.50 U	03/18/04 0.30 U 0.30 U NA 0.20 U 0.80 U 0.30 U 0.20 U NA 0.50 U	0.30 U 1.0 0.40 U 0.30 U 0.90 U 0.40 U 0.40 U 0.40 U	03/22/05 0.30 U 0.40 U 0.40 U 0.30 U 0.90 U 0.40 U 0.40 U 0.40 U 0.40 U	09/23/05 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U	03/17/06 0.30 U 0.30 U NA 0.50 U 0.50 U 0.40 U 0.40 U NA 0.30 U	06/22/06 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U	1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	11/20/14 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U
1,1,2-Trichloroethane 1,2-Dichloroethane Chloroethane Chloroform Methylene Chloride Tetrachloroethene Trichloroethene is-1,2-Dichloroethene	S CAO Goal ¹ 5 5 5 0.19 5 5 5 5 5 5 5 5 5 5 5 5 6 7 7 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	ample Date: Units ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	2.0 U 5.0 NA 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U NA	04/14/99 0.35 U 130 NA 0.59 U 1.1 U 0.62 U 0.44 U NA	0.20 U 110 NA 0.20 U 1.0 U 0.30 U 0.30 U NA	12/19/01 0.20 U 7.8 NA 0.20 U 1.0 U 0.30 U 0.30 U NA	10/07/02 0.30 U 16 NA 0.20 U 0.90 U 0.20 U 0.20 U 0.10 U NA	03/03/03 0.30 U 0.40 U 0.50 U 0.20 U 0.90 U 0.20 U 0.10 U 0.30 U	0.30 U 3.7 0.50 U 0.20 U 0.80 U 0.30 U 0.20 U	03/18/04 0.30 U 0.30 U NA 0.20 U 0.80 U 0.30 U 0.20 U NA	0.30 U 1.0 0.40 U 0.30 U 0.90 U 0.40 U 0.40 U	03/03/03 0.30 U 0.40 U 0.50 U 0.20 U 0.90 U 0.20 U 0.10 U 0.30 U	0.30 U 3.7 0.50 U 0.20 U 0.80 U 0.30 U 0.20 U 0.20 U	03/18/04 0.30 U 0.30 U NA 0.20 U 0.80 U 0.30 U 0.20 U NA	10/11/04 0.30 U 1.0 0.40 U 0.30 U 0.90 U 0.40 U 0.40 U 0.40 U	03/22/05 0.30 U 0.40 U 0.40 U 0.30 U 0.90 U 0.40 U 0.40 U 0.40 U	09/23/05 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U	03/17/06 0.30 U 0.30 U NA 0.50 U 0.50 U 0.40 U 0.40 U	06/22/06 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U	1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	11/20/14 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U
1,1,2-Trichloroethane 1,2-Dichloroethane Chloroethane Chloroform Methylene Chloride Tetrachloroethene Trichloroethene Cis-1,2-Dichloroethene Vinyl Chloride	S CAO Goal ¹ 5 5 0.19 5 5 5 2 1000	ample Date: Units ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	2.0 U 5.0 NA 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U	0.35 U 130 NA 0.59 U 1.1 U 0.62 U 0.44 U NA 0.71 U 0.56 U	11/14/01 0.20 U 110 NA 0.20 U 1.0 U 0.30 U 0.30 U NA 0.20 U NA 0.20 U MW-8D	12/19/01 0.20 U 7.8 NA 0.20 U 1.0 U 0.30 U 0.30 U NA 0.20 U 0.40 U 0.50 U 0.50 U 0.50 U 0.50 U 0.50 U 0.50 U	0.30 U 16 NA 0.20 U 0.99 U 0.10 U NA 0.30 U 0.30 U	03/03/03 0.30 U 0.40 U 0.50 U 0.20 U 0.99 U 0.10 U 0.30 U 0.30 U 0.30 U	0.30 U 3.7 0.50 U 0.20 U 0.80 U 0.30 U 0.20 U 0.20 U 0.50 U	03/18/04 0.30 U 0.30 U NA 0.20 U 0.80 U 0.30 U 0.20 U 0.20 U NA 0.50 U	0.30 U 1.0 0.40 U 0.30 U 0.30 U 0.90 U 0.40 U 0.40 U 0.40 U	03/03/03 0.30 U 0.40 U 0.50 U 0.20 U 0.90 U 0.10 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U	0.30 U 3.7 0.50 U 0.20 U 0.80 U 0.30 U 0.20 U 0.20 U 0.50 U	0.30 U 0.30 U NA 0.20 U 0.30 U 0.20 U 0.30 U 0.20 U NA 0.50 U 0.50 U 0.50 U	0.30 U 1.0 0.40 U 0.30 U 0.90 U 0.40 U 0.40 U 0.40 U	03/22/05 0.30 U 0.40 U 0.40 U 0.30 U 0.90 U 0.40 U 0.40 U 0.40 U 0.40 U	09/23/05 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U	03/17/06 0.30 U 0.30 U NA 0.50 U 0.50 U 0.40 U 0.40 U NA 0.30 U	06/22/06 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U	1.0 U 1.0 U	11/20/14 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	1.0 U 1.0 U
1,1,2-Trichloroethane 1,2-Dichloroethane Chloroethane Chloroform Methylene Chloride Tetrachloroethene Trichloroethene Cis-1,2-Dichloroethene Vinyl Chloride	S CAO Goal ¹ 5 5 0.19 5 5 5 2 1000	ample Date: Units ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	2.0 U 5.0 U 5.0 U 5.0 U 5.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U	0.35 U 130 NA 0.59 U 1.1 U 0.62 U 0.44 U NA 0.71 U 0.56 U	11/14/01 0.20 U 110 NA 0.20 U 1.0 U 0.30 U 0.30 U NA 0.20 U NA 0.20 U	12/19/01 0.20 U 7.8 NA 0.20 U 1.0 U 0.30 U 0.30 U NA 0.20 U NA 0.20 U	10/07/02 0.30 U 16 NA 0.20 U 0.90 U 0.10 U 0.10 U NA 0.30 U	03/03/03 0.30 U 0.40 U 0.50 U 0.20 U 0.90 U 0.20 U 0.10 U 0.30 U 0.30 U	0.30 U 3.7 0.50 U 0.20 U 0.80 U 0.30 U 0.30 U 0.20 U 0.20 U	0.30 U 0.30 U 0.30 U NA 0.20 U 0.80 U 0.30 U 0.30 U 0.20 U NA 0.50 U 0.20 U	0.30 U 1.0 0.40 U 0.30 U 0.90 U 0.90 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U	03/03/03 0.30 U 0.40 U 0.50 U 0.20 U 0.90 U 0.20 U 0.30 U 0.30 U 0.30 U	0.30 U 3.7 0.50 U 0.20 U 0.80 U 0.30 U 0.30 U 0.20 U 0.20 U 0.20 U	0.30 U 0.30 U 0.30 U NA 0.20 U 0.30 U 0.30 U 0.20 U NA 0.50 U 0.20 U	0.30 U 1.0 0.40 U 0.30 U 0.90 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U	0.30 U 0.40 U 0.40 U 0.30 U 0.90 U 0.90 U 0.40 U 0.40 U 0.40 U 0.40 U 0.20 U	0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U 0.40 U 0.30 U 0.30 U	03/17/06 0.30 U 0.30 U NA 0.50 U 0.50 U 0.40 U 0.40 U NA 0.30 U 0.30 U	0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U 0.40 U 0.30 U 0.30 U	1.0 U 1.0 U	1.0 U 1.0 U	1.0 U 1.0 U
1.1.2-Trichloroethane 1.2-Dichloroethane Chloroethane Chloroform Methylene Chloride Tetrachloroethene Trichloroethene ritrichloroethene cis-1.2-Dichloroethene Vinyl Chloride Garbon Disulfide	S CAO Goal ¹ 5 5 0.19 5 5 5 2 1000	ample Date: Units ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	2.0 U 5.0 U 5.0 U 2.0 U 5.0 U 2.0 U 2.0 U NA 2.0 U 2.0 U 2.0 U MW-8D	04/14/99 0.35 U 130 NA 0.59 U 1.1 U 0.62 U 0.44 U NA 0.71 U 0.56 U MW8D	11/14/01 0.20 U 110 NA 0.20 U 1.0 U 0.30 U 0.30 U NA 0.20 U 0.30 U NA 0.20 U 0.30 U MW-8D	12/19/01 0.20 U 7.8 NA 0.20 U 1.0 U 0.30 U NA 0.20 U NA 0.20 U MW-8D	10/07/02 0.30 U 16 NA 0.20 U 0.90 U 0.10 U 0.10 U NA 0.30 U 0.30 U 0.40	03/03/03 0.30 U 0.40 U 0.50 U 0.50 U 0.90 U 0.90 U 0.10 U 0.30 U 0.30 U 0.30 U 0.30 U 0.40 U	10/09/03 0.30 U 3.7 0.50 U 0.20 U 0.80 U 0.30 U 0.20 U 0.50 U 0.20 U 0.50 U 0.20 U 0.50 U 0.20 U	03/18/04 0.30 U 0.30 U NA 0.20 U 0.80 U 0.30 U NA 0.20 U 0.30 U 0.20 U 0.20 U MA 0.50 U 0.20 U MW-8D	10/11/04 0.30 U 1.0 0.40 U 0.30 U 0.90 U 0.40 U 0.40 U 0.40 U 0.40 U 0.20 U MW-8S 11/01/94	03/03/03 0.30 U 0.40 U 0.50 U 0.50 U 0.90 U 0.20 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U MW-8S	10/09/03 0.30 U 3.7 0.50 U 0.20 U 0.80 U 0.30 U 0.20 U 0.50 U 0.50 U 0.50 U 0.20 U 0.50 U 0.20 U	0.30 U 0.30 U 0.30 U NA 0.20 U 0.80 U 0.30 U 0.30 U 0.20 U 0.20 U NA 0.50 U 0.20 U MW-8S	0.30 U 1.0 0.40 U 0.30 U 0.30 U 0.90 U 0.40 U	0.30 U 0.40 U 0.40 U 0.30 U 0.30 U 0.90 U 0.40 U	09/23/05 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U 0.30 U 0.30 U 0.40 U 0.30 U 0.40 U 0.30 U 0.40 U 0.30 U	0.30 U 0.30 U 0.30 U NA 0.50 U 0.50 U 0.40 U 0.40 U NA 0.30 U 0.30 U 0.30 U	0.30 U 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.30 U 0.40 U 0.30 U 0.30 U 0.30 U	1.0 U 1.0 U	1.0 U 1.0 U	1.0 U 1.0 U
1.1.2-Trichloroethane 1.2-Dichloroethane Chloroethane Chloroethane Chloroforn Methylene Chloride Tetrachloroethene Trichloroethene Sis-1.2-Dichloroethene Vinyl Chloride Carbon Disuffide	S CAO Goal 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	2.0 U 5.0 NA 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U 2.0 U NA 2.0 U 1/16/15	0.4/14/99 0.35 U 130 NA 0.59 U 1.1 U 0.62 U 0.44 U NA 0.71 U 0.56 U MW8D 10/04/16	11/14/01 0.20 U 110 NA 0.20 U 1.0 U 0.30 U 0.30 U NA 0.20 U 0.30 U MW-8D 10/03/17	12/19/01 7.8 NA 0.20 U 1.0 U 0.30 U 0.30 U 0.30 U NA 0.20 U 0.20 U 0.30 U 0.30 U 1.0 U 0.30 U 0.30 U 0.20 U 0.30 U	10/07/02 0.30 U 16 NA 0.20 U 0.90 U 0.10 U NA 0.30 U 0.30 U 0.40	03/03/03 0.30 U 0.40 U 0.50 U 0.20 U 0.90 U 0.20 U 0.10 U 0.30 U 0.30 U 0.30 U 0.40 U 0.40 U 0.50 U	10/09/03 0.30 U 3.7 0.50 U 0.20 U 0.80 U 0.30 U 0.20 0.20 U 0.50 U 0.50 U 0.70 U	0.30 U 0.30 U 0.30 U NA 0.20 U 0.80 U 0.80 U 0.20 U 0.20 U NA 0.50 U 0.20 U NA 0.50 U 0.20 U NA 0.50 U 0.20 U 1.0 U	10/11/04 0.30 U 1.0 0.40 U 0.30 U 0.90 U 0.40 U 1.0 U 0.40 U	03/03/03 0.30 U 0.40 U 0.50 U 0.20 U 0.90 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.40 U 0.50 U	10/09/03 0.30 U 3.7 0.50 U 0.20 U 0.80 U 0.20 U 0.20 U 0.50 U 0.20 U 0.50 U 0.20 U 0.20 U 0.10 U 0.20 U	0.30 U 0.30 U 0.30 U NA 0.20 U 0.80 U 0.80 U 0.20 U NA 0.20 U NA 0.50 U 0.720 U NA 0.20 U 0.80 U 0.50 U 0.20 U	0.30 U 1.0 0.40 U 0.30 U 0.40 U 0.90 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.20 U MW-8S 12/14/98	0.30 U 0.40 U 0.40 U 0.40 U 0.30 U 0.90 U 0.40 U 0.40 U 0.40 U 0.40 U 0.20 U 0.40 U 0.35 U	0.30 U 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U 0.40 U 0.40 U 0.40 U 0.30 U 0.40 U 0.30 U	0.3/17/06 0.30 U 0.30 U NA 0.50 U 0.50 U 0.40 U 0.40 U NA 0.30 U 0.40 U NA 0.30 U 0.40 U	0.30 U 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U	05/02/11 1.0 U	11/20/14 1.0 U	1.0 U
1.1.2-Trichloroethane 1.2-Dichloroethane Chloroethane Chloroethane Chloroethane Chloroethane Chloroethane Chloroethane Tetrachloroethene Trichloroethene Cis-1.2-Dichloroethene Carbon Disulfide Volatile Organics 1.1.2-Trichloroethane 1.2-Dichloroethane	S CAO Goal 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	ample Date: Units ug/L	2.0 U 5.0 NA 2.0 U 5.0 U 5.0 U 2.0 U 2.0 U 2.0 U NA 2.0 U NA 2.0 U NA 1/16/15	0.35 U 130 NA 0.59 U 1.1 U 0.62 U 0.44 U NA 0.71 U 0.56 U 0.56 U 0.56 U	11/14/01 0.20 U 110 NA 0.20 U 1.0 U 3.0 U 0.30 U NA 0.20 U 0.30 U NA 0.20 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.70 U 0.70 U	12/19/01 0.20 U 7.8 NA 0.20 U 1.0 U 0.30 U NA 0.20 U 0.30 U NA 1.0 U 0.20 U 1.0 U	10/07/02 0.30 U 16 NA 0.20 U 0.90 U 0.20 U 0.10 U NA 0.30 U 0.30 U 0.40 U 0.40 U 0.50	03/03/03 0.30 U 0.40 U 0.50 U 0.20 U 0.90 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.40 U 0.50 U	10/09/03 0.30 U 3.7 0.50 U 0.20 U 0.80 U 0.30 U 0.20 U 0.20 U 0.20 U 0.20 U 0.50 U 0.20 U 0.50 U 0.10 U	0.30 U 0.30 U 0.30 U NA 0.20 U 0.80 U 0.80 U 0.50 U 0.20 U NA 0.50 U 0.40 U 0.50 U	10/11/04 0.30 U 1.0 0.40 U 0.30 U 0.90 U 0.40 U 0.	03/03/03 0.30 U 0.40 U 0.50 U 0.50 U 0.90 U 0.20 U 0.30 U	10/09/03 0.30 U 3.7 0.50 U 0.20 U 0.80 U 0.30 U 0.20 U 0.20 U 0.20 U 0.50 U 0.20 U 0.50 U 0.20 U 0.50 U 0.20 U 0.10 U 0.20 U	03/18/04 0.30 U 0.30 U NA 0.20 U 0.80 U 0.30 U 0.20 U NA 0.50 U 0.750 U 0.750 U 0.750 U 0.7723/98	10/11/04 0.30 U 1.0 0.40 U 0.30 U 0.90 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.20 U MW-8S 12/14/98	0.30 U 0.40 U 0.20 U MW-8S 04/14/99 0.35 U 0.21 U	0.30 U 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U 0.20 U 0.20 U 0.20 U 0.20 U 0.20 U	03/17/06 0.30 U 0.30 U NA 0.50 U 0.50 U 0.40 U NA 0.30 U 0.40 U NA 10.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U	0.30 U 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.40 U	05/02/11 1.0 U	11/20/14 1.0 U 1.	06/04/15 1.0 U
1.1.2-Trichloroethane 1.2-Dichloroethane Chloroethane Chloroethane Chloroforn Methylene Chloride Tetrachloroethene Trichloroethene Sis-1.2-Dichloroethene Vinyl Chloride Carbon Disuffide Violatile Organics 1,1.2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane	S CAO Goal 5 5 5 5 CAO Goal 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	ample Date: Units ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	12/14/98 2.0 U 5.0 NA 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U 1.0 U 2.0 U 1.1/16/15 1.0 U 1.0 U	0.4/14/99 0.35 U 130 NA 0.59 U 1.1 U 0.62 U 0.44 U NA 0.71 U 0.56 U MW8D 10/04/16 5.0 U NA	11/14/01 0.20 U 110 NA 0.20 U 1.0 U 0.30 U 0.30 U NA 0.20 U 0.30 U NA 1.0 U 0.70 U 1.0 U 0.70 J 1.0 U	12/19/01 0.20 U 7.8 NA 0.20 U 1.0 U 0.30 U 0.30 U NA 0.20 U 0.20 U 1.0 U	10/07/02 0.30 U 16 NA 0.20 U 0.90 U 0.10 U NA 0.30 U MW-8D 09/20/19 1.0 U 1.0 U	03/03/03 0.30 U 0.40 U 0.50 U 0.50 U 0.20 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 10/08/20 1.0 U 1.0 U 1.0 U	10/09/03 0.30 U 3.7 0.50 U 0.20 U 0.80 U 0.30 U 0.20 U 0.50 U 0.50 U 0.50 U 0.70 U	0.30 U 0.30 U 0.30 U NA 0.20 U 0.80 U 0.30 U NA 0.20 U 0.80 U 0.20 U NA 0.50 U 0.20 U 1.0 U 0.30 U 0.20 U 0.30 U 0.20 U 0.30 U 0	10/11/04 0.30 U 1.0 0.40 U 0.30 U 0.90 U 0.40 U 0.10 U	0.3/03/03 0.30 U 0.40 U 0.50 U 0.50 U 0.90 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U MW-8S 10/20/97	10/09/03 0.30 U 3.7 0.50 U 0.20 U 0.80 U 0.30 U 0.20 U 0.50 U 0.50 U 0.50 U 0.20 U 0.50 U 0.20 U 10 U	03/18/04 0.30 U 0.30 U NA 0.20 U 0.30 U NA 0.20 U 0.30 U 0.30 U 0.20 U NA 0.50 U 0.20 U NA 0.50 U 0.20 U 0.20 U NA 0.50 U 0.20 U NA 0.50 U 0.20 U NA 0.50 U 0.20 U	0.30 U 1.0 0.40 U 0.30 U 0.40 U 0.90 U 0.40 U 0.40 U 0.40 U 0.20 U MW-8S 12/14/98	0.30 U 0.40 U 0.20 U 0.40 U 0.20 U 0.40 U 0.20 U 0.40 U 0.20 U	0.30 U 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U 0.30 U 0.30 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U	0.30 U 0.30 U 0.30 U NA 0.50 U 0.40 U 0.40 U NA 0.30 U NA 0.30 U 0.40 U 0.40 U NA 0.30 U 0.40 U 0.40 U NA 0.30 U 0.40 U NA 0.30 U 0.40 U NA	0.30 U 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U 0.30 U 0.40 U	1.0 U	11/20/14 1.0 U 1.	1.0 U 1.0 U
1.1.2-Trichloroethane 1.2-Dichloroethane Chloroethane Chloroethane Chloroethane Chloroethane Chloroethane Chloroethane Tetrachloroethane Trichloroethane Carbon Disulfide Volatillo Organics 1.1.2-Trichloroethane 1.2-Dichloroethane Chloroethane Chloroethane Chloroethane Chloroethane	S CAO Goal 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	ample Date: Units ug/L	12/14/98 2.0 U 5.0 NA 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U 2.0 U 11/16/15 1.0 U 1.0 U 1.0 U	0.35 U 130 NA 0.59 U 1.1 U 0.62 U 0.44 U NA 0.71 U 0.56 U MW8D 10/04/16 5.0 U 1.0 U	11/14/01 0.20 U 110 110 NA 0.20 U 1.0 U 0.30 U NA 0.20 U NA 0.20 U 1.0 U NA 0.20 U 1.0 U 0.30 U NA 0.20 U 1.0 U 0.70 J 1.0 U 1.0 U	12/19/01 7.8 NA 0.20 U 1.9 U 1.9 U 0.30 U 0.30 U NA 0.20 U 1.0 U 1.0 U 1.1/20/18 1.0 U 1.0 U 1.0 U 1.0 U	10/07/02 0.30 U 16 NA 0.20 U 0.90 U 0.10 U NA 0.30 U 0.30 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	03/03/03 0.30 U 0.40 U 0.50 U 0.20 U 0.90 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 1.0 U 0.30 U	0.30 U 3.7 0.50 U 0.20 U 0.80 U 0.30 U 0.20 U 0.80 U 0.20 U 0.20 U 0.20 U 0.50	0.3/18/04 0.30 U 0.30 U NA 0.20 U 0.80 U 0.30 U 0.30 U 0.20 U NA 0.50 U 0.20 U NA 0.50 U 0.20 U 1.00 U 0.30 U 0.20 U 1.00 U 0.30 U 0.3	10/11/04 0.30 U 1.0 0.40 U 0.30 U 0.90 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 10.10/194 10 U 10 U 10 U 10 U 10 U	03/03/03 0.30 U 0.40 U 0.50 U 0.20 U 0.90 U 0.20 U 0.30 U 0.30 U 0.30 U 0.30 U 10/20/97 10 U 10 U NA 10 U 10 U	0.30 U 3.7 0.50 U 0.20 U 0.80 U 0.30 U 0.20 U 0.30 U 0.20 U	0.30 U 0.30 U 0.30 U NA 0.20 U 0.80 U 0.80 U 0.20 U NA 0.50 U 0.20 U NA 0.50 U 0.20 U V 0.20 U NA 0.50 U 0.20 U NA 0.50 U 0.20 U	10/11/04 0.30 U 1.0 0.40 U 0.30 U 0.30 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.20 U MW-8S 12/14/98 2.0 U NA	0.30 U 0.40 U 0.40 U 0.40 U 0.30 U 0.90 U 0.40 U 0.20 U MW-8S 04/14/99 0.35 U 0.21 U NA 0.59 U	0.30 U 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U 0.30 U 0.30 U 0.40 U 0.40 U 0.30 U 0.40 U 0.30 U 0.40 U 0.30 U 0.40 U 0.30 U	03/17/06 0.30 U 0.30 U NA 0.50 U 0.40 U 0.40 U NA 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U	0.30 U 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.40 U 0.40 U 0.30 U 0.40 U 0.40 U 0.30 U	05/02/11 1.0 U	11/20/14 1.0 U 1.	1.0 U
1.1.2-Trichloroethane 1.2-Dichloroethane Chloroethane Chloroethane Chloroethane Chloroethane Trichloroethene Trichloroethene Trichloroethene Vinyl Chloride Carbon Disuffide Volatile Organics 1.1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chloroethane Chloroform Methylene Chloride	S CAO Goal 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	ample Date: Units ug/L	12/14/98 2.0 U 5.0 NA 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 1/16/15 1.0 U	04/14/99 0.35 U 130 NA 0.59 U 1.1 U 0.62 U 0.44 U NA 0.71 U 0.56 U MW8D 10/04/16 5.0 U 1.0 U NA 1.0 U S.0 U	11/14/01 0.20 U 110 NA 0.20 U 1.0 U 0.30 U 0.30 U NA 0.20 U NA 0.20 U 1.0 U 0.70 U 1.0 U 0.70 J 1.0 U 1.0 U	12/19/01 7.8 NA 0.20 U 7.8 NA 0.20 U 1.0 U 0.30 U NA 0.20 U 0.20	10/07/02 0.30 U 16 NA 0.20 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	03/03/03 0.30 U 0.40 U 0.50 U 0.50 U 0.20 U 0.20 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 10/08/20 MW-8D 10/08/20	10/09/03 0.30 U 3.7 0.50 U 0.20 U 0.80 U 0.20 U 0.20 U 0.20 U 0.20 U 0.20 U 0.50 U 0.20 U 1.0 U 1.0 UJ NA 1.0 UJ 1.0 UJ	03/18/04 0.30 U 0.30 U 0.30 U NA 0.20 U 0.30 U 0.30 U 0.30 U 0.50 U 0.20 U 0.20 U 0.20 U 0.20 U 1.0 U 0.20 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	10/11/04 0.30 U 1.0 0.40 U 0.30 U 0.90 U 0.40 U 0.	03/03/03 0.30 U 0.40 U 0.50 U 0.50 U 0.20 U 0.90 U 0.30 U	10/09/03 0.30 U 3.7 0.50 U 0.20 U 0.80 U 0.20 U	03/18/04 0.30 U 0.30 U 0.30 U NA 0.20 U 0.30 U 0.30 U 0.20 U 0.2	10/11/04 0.30 U 1.0 0.40 U 0.30 U 0.30 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.20 U MW-8S 12/14/98 2.0 U 0.40 U 0.50 U 0.50 U	0.30 U 0.40 U 0.40 U 0.40 U 0.30 U 0.40 U 0.30 U 0.40 U 0.20 U MW-8S 04/14/99 0.35 U 0.21 U NA 0.59 U 1.1 U	09/23/05 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U 0.40 U 0.30 U	03/17/06 0.30 U 0.30 U 0.30 U NA 0.50 U 0.40 U 0.40 U NA 0.30 U 0.40 U 0.30 U 0.20 U 0.20 U 0.20 U 0.20 U 0.20 U 0.20 U 1.0 U	0.30 U 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U 0.40 U 0.40 U 0.40 U	05/02/11 1.0 U 1.	11/20/14 1.0 U 1.	06/04/15 1.0 U 1.
1.1.2-Trichloroethane 1.2-Dichloroethane Chioroethane Chioroethane Chioroethane Chioroethane Methylene Chloride Tetrachioroethene Trichloroethene Trichloroethene Cis-1.2-Dichloroethane Volattilo Organics 1.1.2-Trichloroethane 1.1.2-Trichloroethane Chioroethane Chioroethane Chioroethane Chioroethane Chioroethane Methylene Chloride Tetrachloroethene	S CAO Goal 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	ample Date: Units ug/L	12/14/98 2.0 U 5.0 NA 2.0 U 5.0 U 5.0 U 7.0 U	0.4/14/99 0.35 U 130 NA 0.59 U 1.1 U 0.62 U 0.44 U NA 0.71 U 0.56 U MW8D 10/04/16 5.0 U 1.0 U NA 1.0 U 1.0 U 1.0 U	11/14/01 0.20 U 110 NA 0.20 U 1.0 U 0.30 U 0.30 U NA 0.20 U 0.30 U 0.30 U 0.30 U 0.70 U	12/19/01 7.8 NA 0.20 U 1.0 U 1.0 U 0.30 U NA 0.20 U 1.0 U 0.30 U NA 0.20 U 1.0 U	10/07/02 0.30 U 16 NA 0.20 U 0.99 U 0.10 U NA 0.30 U 0.10 U NA 0.30 U 0.30 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U NA	03/03/03 0.30 U 0.40 U 0.40 U 0.50 U 0.50 U 0.20 U 0.30 U 1.00 U 1.0 U	10/09/03 0.30 U 3.7 0.50 U 0.20 U 0.80 U 0.20 0.20 U 0.50 U 0.50 U 0.20 U 0.50 U 0.5	03/18/04 0.30 U 0.30 U 0.30 U NA 0.20 U 0.80 U 0.80 U 0.20 U NA 0.50 U 0.20 U MW-8D 09/14/22 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	10/11/04 0.30 U 1.0 0.40 U 0.30 U 0.30 U 0.30 U 0.30 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 11/01/94 11/01/94 10 U 10 U 10 U 10 U 10 U	03/03/03 0.30 U 0.40 U 0.50 U 0.50 U 0.50 U 0.90 U 0.10 U 0.30 U 0.30 U 0.30 U 10/20/97 10 U 10 U NA 10 U 10 U 10 U 10 U	10/09/03 0.30 U 3.7 0.50 U 0.20 U 0.80 U 0.30 U 0.20 U 0.50 U 0.20 U	03/18/04 0.30 U 0.30 U NA 0.20 U NA 0.30 U 0.30 U NA 0.20 U NA 0.50 U 0.20 U NA 0.50 U 0.20 U NA 0.20 U NA 0.20 U NA 0.20 U NA 0.20 U	10/11/04 0.30 U 1.0 0.40 U 0.30 U 0.30 U 0.90 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.20 U MW-8S 12/14/98 2.0 U 0.40 U	0.30 U 0.40 U 0.40 U 0.40 U 0.30 U 0.90 U 0.40 U 0.20 U 0.40 U 0.20 U 0.35 U 0.21 U NA 0.59 U 1.1 U 0.62 U 0.62 U	09/23/05 0.30 U 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.50 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U 0.20 U 0.30 U	03/17/06 0.30 U 0.30 U 0.30 U NA 0.50 U 0.50 U 0.50 U 0.40 U NA 0.30 U 0.30 U 0.20 U 0.20 U NA 0.20 U 0.20 U 0.20 U 0.20 U 0.30 U	0.30 U 0.30 U 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U 0.40 U 0.50 U	1.0 U	11/20/14 1.0 U 1.	06/04/15 1.0 U 0.30 U 0.30 U 0.30 U 0.80 U 0.80 U 0.30 U 0.80 U 0.30 U
1.1.2-Trichloroethane 1.2-Dichloroethane Chloroethane Chloroethane Chloroethane Chloroethane Trichloroethene Trichloroethene Trichloroethene Vinyl Chloride Carbon Disuffide Volatile Organics 1.1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chloroethane Chloroform Methylene Chloride	S CAO Goal 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	ample Date: Units ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	12/14/98 2.0 U 5.0 NA 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 1/16/15 1.0 U	04/14/99 0.35 U 130 NA 0.59 U 1.1 U 0.62 U 0.44 U NA 0.71 U 0.56 U MW8D 10/04/16 5.0 U 1.0 U NA 1.0 U S.0 U	11/14/01 0.20 U 110 NA 0.20 U 1.0 U 0.30 U 0.30 U NA 0.20 U NA 0.20 U 1.0 U 0.70 U 1.0 U 0.70 J 1.0 U 1.0 U	12/19/01 7.8 NA 0.20 U 7.8 NA 0.20 U 1.0 U 0.30 U NA 0.20 U 0.20	10/07/02 0.30 U 16 NA 0.20 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	03/03/03 0.30 U 0.40 U 0.50 U 0.50 U 0.20 U 0.20 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 10/08/20 MW-8D 10/08/20	10/09/03 0.30 U 3.7 0.50 U 0.20 U 0.80 U 0.20 U 0.20 U 0.20 U 0.20 U 0.20 U 0.50 U 0.20 U 1.0 U 1.0 UJ NA 1.0 UJ 1.0 UJ	03/18/04 0.30 U 0.30 U 0.30 U NA 0.20 U 0.30 U 0.30 U 0.30 U 0.50 U 0.20 U 0.20 U 0.20 U 0.20 U 1.0 U 0.20 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	10/11/04 0.30 U 1.0 0.40 U 0.30 U 0.90 U 0.40 U 0.	03/03/03 0.30 U 0.40 U 0.50 U 0.50 U 0.20 U 0.90 U 0.30 U	10/09/03 0.30 U 3.7 0.50 U 0.20 U 0.80 U 0.20 U	03/18/04 0.30 U 0.30 U 0.30 U NA 0.20 U 0.30 U 0.30 U 0.20 U 0.2	10/11/04 0.30 U 1.0 0.40 U 0.30 U 0.30 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.20 U MW-8S 12/14/98 2.0 U 0.40 U 0.50 U 0.50 U	0.30 U 0.40 U 0.40 U 0.40 U 0.30 U 0.40 U 0.30 U 0.40 U 0.20 U MW-8S 04/14/99 0.35 U 0.21 U NA 0.59 U 1.1 U	09/23/05 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U 0.40 U 0.30 U	03/17/06 0.30 U 0.30 U 0.30 U NA 0.50 U 0.40 U 0.40 U NA 0.30 U 0.40 U 0.30 U 0.20 U 0.20 U 0.20 U 0.20 U 0.20 U 0.20 U 1.0 U	0.30 U 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U 0.40 U 0.40 U 0.40 U	05/02/11 1.0 U 1.	11/20/14 1.0 U 1.	06/04/15 1.0 U 1.
1.1.2-Trichloroethane 1.2-Dichloroethane Chloroethane Chloroethane Chloroethane Chloroethane Trichloroethene Trichloroethene Trichloroethene Vinyt Chloride Carbon Disuffide Vingt Chloride Vingt Chloride Vingt Chloride Vingt Chloride Carbon Disuffide Vingt Chloride Vingt Chloride Vingt Chloroethane 1,2-Dichloroethane Chloroethane	S CAO Goal 5 5 5 5 5 5 5 5 5	ample Date: Units ug/L	12/14/98 2.0 U 5.0 NA 2.0 U 5.0,0 5.0,0 5.0,0 2.0 U 2.0 U 2.0 U 1/1/6/15 1.0 U	04/14/99 0.35 U 130 NA 0.59 U 1.1 U 0.62 U 0.44 U NA 0.56 U MW8D 10/04/16 5.0 U 1.0 U NA 1.0 U	11/14/01 0.20 U 110 NA 0.20 U 1.0 U 0.30 U 0.30 U 0.30 U 0.20 U NA 0.20 U MW-8D 10/03/7 1.0 U 0.70 J 1.0 U 1.0 U NA	12/19/01 0.20 U 7.8 NA 0.20 U 1.0 U 0.30 U 0.30 U 0.30 U 0.20 U MW-8D 11/20/18 1.0 U	10/07/02 0.30 U 16 NA 0.20 U 0.90 U 0.70 U 0.70 U 0.70 U 0.70 U 0.70 U 0.70 U 1.0 U 1.0 U 1.0 U 1.0 U NA	03/03/03 0.30 U 0.40 U 0.50 U 0.50 U 0.20 U 0.20 U 0.30 U 1.0 U	10/09/03 0.30 U 3.7 0.50 U 0.20 U 0.	0.3/18/04 0.30 U 0.30 U NA 0.20 U NB 0.80 U NA 0.20 U NA 0.20 U NA 0.20 U NA 1.0 U	10/11/04 0.30 U 1.0 0.40 U 0.30 U 0.30 U 0.40 U 0.	03/03/03 0.30 U 0.40 U 0.50 U 0.20 U 0.20 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 10 U 10 U 10 U 10 U 10 U 10 U 10 U	10/09/03 0.30 U 3.7 0.50 U 0.20 U 0.	03/18/04 0.30 U 0.30 U NA 0.20 U NA 0.20 U 0.30 U NA 0.20 U 0.30 U NA 0.20 U NA 0.50 U 0.20 U NA 0.20 U NA 0.20 U NA 0.20 U	10/11/04 0.30 U 1.0 0.40 U 0.30 U 0.30 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.20 U MW-8S 12/14/98 2.0 U 2.0 U NA 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U	03/22/05 0.30 U 0.40 U 0.40 U 0.30 U 0.30 U 0.40 U 0.20 U MW-8S 04/14/99 0.35 U 0.21 U NA 0.59 U 1.1 U 0.62 U 0.64 U	09/23/05 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U 0.40 U 0.30 U	03/17/06 0.30 U 0.30 U 0.30 U NA 0.50 U 0.40 U 0.40 U NA 0.30 U	0.30 U 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U 0.30 U 0.30 U 0.30 U 0.40 U 0.30 U 0.30 U 0.40 U 0.30 U 0.30 U 0.30 U 0.30 U 0.40 U 0.30 U 0.30 U 0.30 U 0.40 U 0.30 U 0.30 U 0.40 U 0.30 U 0.40 U 0.30 U 0.40 U 0.	1.0 U	11/20/14 1.0 U 1.	1.0 U
1.1.2-Trichloroethane 1.2-Dichloroethane Chloroethane Chloroethane Chloroethane Methylene Chloride Tetrachloroethene Trichloroethene Trichloroethene Carbon Disulfide Volettile Organics 1.1.2-Trichloroethane 1.1.2-Trichloroethane 1.2-Dichloroethane Chloroethane Chloroethane Chloroethane Trichloroethene Trichloroethene Trichloroethene Trichloroethene Trichloroethene Trichloroethene	S CAO Goal 5 5 5 5 5 5 5 5 5	ample Date: Units ug/L ug/L	12/14/98 2.0 U 5.0 5.0 NA 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U 2.0 U 1/16/15 11/16/15	0.474/99 0.35 U 130 NA 0.59 U 1.1 U 0.62 U 0.44 U NA 0.56 U MW8D 1004/16 5.0 U 1.0 U NA 1.0 U NA	11/14/01 0.20 U 110 NA 0.20 U 1.0 U 0.30 U 0.30 U 0.30 U 0.20 U 0.20 U 0.20 U 1.0 U 0.20 U 0.70 U 0	12/19/01 0.20 U 7.8 NA 0.20 U 1.9 U 0.30 U 0.30 U 0.30 U 0.20 U 11/20/18 1.0 U	10/07/02 0.30 U 16 NA 0.20 U 0.90 U 0.10 U NA 0.30 U	03/03/03 0.30 U 0.40 U 0.40 U 0.50 U 0.20 U 0.20 U 0.30 U	10/09/03 0.30 U 3.7 0.50 U 0.50 U 0.20 U 0.80 U 0.30 U 0.20 U 0.20 U 0.50 U 0.	03/18/04 0.30 U 0.30 U 0.30 U NA 0.20 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.20 U 0.20 U 0.20 U 0.20 U 0.20 U 0.20 U 1.0 U 0.20	10/11/04 0.30 U 1.0 0.40 U 0.30 U 0.30 U 0.30 U 0.40 U 0.	03/03/03 0.30 U 0.40 U 0.40 U 0.50 U 0.20 U 0.20 U 0.20 U 0.30 U	10/09/03 0.30 U 3.7 0.50 U 0.50 U 0.20 U 0.30 U 0.20 U 0.30 U 0.20 U 0.	03/18/04 0.30 U 0.20 U 0.20 U 0.50 U 0.20 U 0.50 U 0.20 U 0.40 U 0.50 U 0.20 U 0.50 U	10/11/04 0.30 U 1.0 0.40 U 0.30 U 0.30 U 0.30 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.20 U 0.40 U 0.40 U 0.20 U 0.40 U 0.	0.3/2/05 0.30 U 0.40 U 0.40 U 0.40 U 0.30 U 0.90 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.20 U MW-8S 04/14/99 0.21 U NA 0.59 U 1.1 U 0.62 U NA	09/23/05 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.50 U 0.40 U 0.40 U 0.30 U	03/17/06 0.30 U 0.30 U 0.30 U NA 0.50 U 0.40 U 0.40 U NA 0.50 U 0.40 U NA 0.30 U	0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U 0.40 U 0.30 U 0.40 U	1.0 U	11/20/14 1.0 U 1.	1.0 U



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		Location ID:	MW-8S	MW-8S	MW-8S	MW-8S	MW-8S	MW-8S	MW-8S	MW-8S	MW-8S	MW-8S	MW-8S	MW-8S	MW-8S	MW-8S	MW-8S	MW-8S	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9D	MW-9S
		Sample Date:	10/11/04	03/22/05	09/23/05	03/17/06	06/22/06	05/02/11	11/20/14	10/04/16	10/03/17	06/04/15	11/16/15	11/20/18	09/20/19	10/08/20	9/14/2021	09/14/22	11/01/94	10/21/97	02/23/98	07/21/98	12/16/98	04/14/99	05/03/11	11/01/94
Volatile Organics	CAO Goal ¹	Units																							1	
1,1,2-Trichloroethane	5	ug/L	0.30 U	0.30 U	0.30 U	0.30 U	0.30 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U [1.0 U]	10 U	10 U	10 U	2.0 U	2.0 U	0.35 U	1.0 U	10 U
1,2-Dichloroethane	5	ug/L	0.40 U	0.40 U	0.30 U	0.30 U	0.30 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U [1.0 U]	13	12	3.0 J	12	4.0	14	1.5	10 U
Chloroethane		ug/L	0.40 U	0.40 U	0.20 U	NA	0.20 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U [1.0 U]	10 U	NA	NA	NA	NA	NA	1.0 U	10 U
Chloroform	0.19	ug/L	0.30 U	0.30 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U [1.0 U]	10 U	10 U	10 U	2.0 U	2.0 U	0.59 U	1.0 U	10 U
Methylene Chloride	5	ug/L	0.90 U	0.90 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U [1.0 U]	10 U	10 U	4.0 J	5.0 U	5.0 U	1.1 U	1.0 U	10 U
Tetrachloroethene	5	ug/L	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	NA	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U [1.0 U]	10 U	10 U	10 U	2.0 U	2.0 U	0.62 U	1.0 U	10 U
Trichloroethene	5	ug/L	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U [1.0 U]	10 U	10 U	10 U	2.0 U	2.0 U	0.44 U	1.0 U	10 U
cis-1,2-Dichloroethene		ug/L	0.40 U	0.40 U	0.40 U	NA	0.40 U	1.0 U	1.0 U	NA.	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U [1.0 U]	NA.	NA	NA	NA	NA	NA	1.0 U	NA.
Vinyl Chloride	2	ug/L	0.40 U	0.40 U	0.30 U	0.30 U	0.30 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U] NA	1.0 U [1.0 U]	1.0 U [1.0 U]	10 U	10 U	10 U	2.0 U	2.0 U	0.71 U	1.0	10 U
Carbon Disulfide	1000	ug/L	0.20 U	0.20 U	0.30 U	0.30 U	0.30 U	1.0 U	1.0 U	1.3	NA	1.0 U	1.0 U	1.0 U	NA	NA NA	NA	1.0 U [1.0 U]	10 U	10 U	10 U	2.0 U	2.0 U	0.56 U	1.0 U	10 U
		Location ID:	MW-9S	MW-9S	MW-9S	MW-9S	MW-9S	MW-9S	MW-10D	MW-10D	MW-10D	MW-10D	MW-10D	MW-10D	MW-10D	MW-10D	MW-10D	MW-10D	MW-10D	MW-10D	MW-10D	MW-10D	MW10D	MW-10D-A	MW-10D-B	MW-10D-C
		Sample Date:	10/21/97	02/23/98	07/20/98	12/16/98	04/14/99	11/20/18	02/28/95	05/28/96	10/23/97	02/25/98	03/16/98	07/21/98	12/16/98	04/12/99	07/13/99	10/12/04	09/23/05	03/15/06	05/02/11	05/15/15	10/04/16	11/01/99	11/02/99	11/02/99
Volatile Organics	CAO Goal ¹	Units																								
1,1,2-Trichloroethane	5	ug/L	10 U	10 U	2.0 U	2.0 U	0.35 U	1.0 U	10 U	53	2,000 U	10 U	8.0	270 E	100 U	70 U	80	28 U	8.2 U	1.6 U	1.0 U	10 U	5.0 U	55	38	35 U
1,2-Dichloroethane	5	ug/L	7.0 J	10 U	2.0 U	2.0 U	0.21 U	1.0 U	24,000	5,800 E	22,000	170	1,100 E	16,000 E	5,400	21,000	25,000 D	7,700	3,700	380	2.1	160	62	16,000	13,000	15,000
Chloroethane		ug/L	NA	NA	NA	NA	NA	1.0 U	10 U	240 E	NA	NA	NA	NA	NA	NA	94	37 U	6.0 U	NA	1.0 U	10 U	1.0 U	41 U	41 U	41 U
Chloroform	0.19	ug/L	10 U	10 U	2.0 U	2.0 U	0.59 U	1.0 U	10 U	5.0 U	2,000 U	10 U	2.0 U	17	100 U	120 U	8.9	34 U	13 U	2.6 U	1.0 U	10 U	1.0 U	37 U	37 U	37 U
Methylene Chloride	5	ug/L	10 U	10 U	5.0 U	5.0 U	1.1 U	1.0 U	10 U	16	2,000 U	10 U	5.0 U	47	250 U	230 U	5.8 B	91 U	13 U	2.6 U	1.0 U	14	5.0 U	99 U	170	430
Tetrachloroethene	5	ug/L	10 U	10 U	2.0 U	2.0 U	0.62 U	1.0 U	10 U	5.0 U	2,000 U	10 U	2.0 U	2.0 U	100 U	120 U	2.8	36 U	11 U	2.2 U	1.0 U	10 U	1.0 U	14 U	14 U	14 U
Trichloroethene	5	ug/L	10 U	10 U	2.0 U	2.0 U	0.44 U	1.0 U	10 U	130	2,000 U	10 U	2.0 U	23	100 U	88 U	56	40 U	26	1.8 U	0.58 J	4.3 J	4.6	58	43	47
cis-1,2-Dichloroethene		ug/L	NA	NA	NA	NA	NA	1.0 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	35 U	20	NA	1.1	NA	8.2	37 U	37 U	37 U
Vinyl Chloride	2	ug/L	10 U	10 U	2.0 U	2.0 U	0.71 U	1.0 U	10 U	35	2,000 U	10 U	6.0	53	100 U	140 U	63	48	76	4.1	7.4	13	20	45 U	260	220
Carbon Disulfide	1000	ug/L	10 U	10 U	2.0 U	2.0 U	0.56 U	1.0 U	10 U	5.0 U	2,000 U	10 U	2.0 U	2.0 U	100 U	110 U	NA	25 U	NA	1.7 U	1.0 U	NA	1.0 U	NA	NA	NA
		Location ID:	MW-10D-D	MW-10DDL	MW-10DDL	MW-10D-E	MW-10D-F	MW-10D-G	MW-10DL	MW-10S	MW-10S	MW-10S	MW-10S	MW-10S	MW-10S	MW-10S	MW-11D	MW-11D	MW-11D	MW-11D	MW-11D	MW-11D	MW-11D	MW-11D	MW-11S	MW-11S
		Sample Date:	11/03/99	03/16/98	07/21/98	11/03/99	11/04/99	11/04/99	05/28/96	02/28/95	10/23/97	02/25/98	07/21/98	04/14/99	05/02/11	11/20/18	02/28/95	05/28/96	10/22/97	02/23/98	07/20/98	12/15/98	04/13/99	05/03/11	02/28/95	10/21/97
Volatile Organics	CAO Goal ¹	Units	11/03/33	03/10/30	01/21/30	11/03/33	11/04/33	11/04/33	03/20/30	02/20/33	10/23/31	02/23/30	07721730	04/14/33	03/02/11	11/20/10	02/20/33	03/20/30	10/22/37	02/23/30	01/20/30	12/13/30	04/13/33	03/03/11	02/20/93	10/21/31
1.1.2-Trichloroethane	CAO Goal	ug/L	35 U	100 U	1.000 U	35 U	35.000 U	35 U	2,500 U	10 U	10 U	10 U	2.0 U	0.35 U	1.0 U	1.0 U	10 U	5.0 U	10 U	10 U	2.0 U	2.0 U	0.35 U	1.0 U	10 U	10 U
1,2-Dichloroethane	5	ug/L	17.000	1.800 D	35.000 D	18,000	19.000	17,000	44.000 D	120	10 U	10 U	2.0 U	0.33 U	1.0 U	1.0 U	10 U	5.0 U	44	3.0 J	2.0 U	2.0 U	0.33 U	1.0 U	10 U	10 U
Chloroethane	J	ug/L	41 U	NA	NA	41 U	41 U	41 U	5,000 U	10 U	NA NA	NA NA	NA NA	NA	1.0 U	1.0 U	10 U	10 U	NA NA	NA NA	NA NA	NA	NA	1.0 U	10 U	NA NA
Chloroform	0.19	ug/L	37 U	100 U	1.000 U	37 U	37 U	37 U	2,500 U	3.0 J	10 U	10 U	2.0 U	0.59 U	1.0 U	1.0 U	10 U	5.0 U	10 U	10 U	2.0 U	2.0 U	0.59 U	1.0 U	10 U	10 U
Methylene Chloride	5	ug/L	410	250 U	2,500 U	730,000	610	750	2,500 U	4.0.JB	10 U	10 U	5.0	1.1 U	1.0 U	1.0 U	10 U	5.0 U	10 U	10 U	4.0.1	5.0 U	1.1 U	1.0 U	10 U	10 U
Tetrachloroethene	5	ug/L	14 U	100 U	1.000 U	14.000 U	14.000 U	14.000 U	2.500 U	10 U	10 U	10 U	2.0 U	0.62 U	1.0 U	1.0 U	10 U	5.0 U	10 U	10 U	2.0 U	2.0 U	0.62 U	1.0 U	10 U	10 U
Trichloroethene	5	ug/L	46	100 U	1,000 U	62	49	49	2,500 U	10 U	10 U	10 U	2.0 U	0.44 U	1.0 U	1.0 U	10 U	5.0 U	10 U	10 U	2.0 U	2.0 U	0.44 U	1.0 U	10 U	10 U
cis-1,2-Dichloroethene		ug/L	NR	NA	NA	50	NA	NA	NA	NA	NA	NA	NA	NA	1.0 U	1.0 U	NA	NA	NA	NA	NA	NA	NA	1.0 U	NA	NA
Vinyl Chloride	2	ug/L	160	100 U	1,000 U	280	45 U	45 U	5,000 U	10 U	10,000 U	10 U	2.0 U	0.71 U	1.0 U	1.0 U	10 U	10 U	10 U	10 U	2.0 U	2.0 U	0.71 U	1.0 U	10 U	10 U
Carbon Disulfide	1000	ug/L	NA	100 U	1,000 U	NA	NA	NA	2,500 U	10 U	10 U	10 U	2.0 U	0.56 U	1.0 U	1.0 U	10 U	5.0 U	10 U	10 U	2.0 U	2.0 U	0.56 U	1.0 U	10 U	10 U
		Location ID:	MW-11S	MW-11S	MW-11S	MW-11S	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D	MW-12D
		Sample Date:	MW-11S 02/23/98	07/20/98	MW-11S 12/15/98	04/13/99	10/23/97	02/25/98	07/21/98	12/15/98	04/13/99	11/13/01	12/19/01	10/07/02	10/09/03	03/18/04	MW-12D 10/11/04	03/22/05	09/22/05	03/16/06	06/22/06	05/02/11		06/04/15		10/04/16
Volatile Organics	CAO Goal ¹	Units	02/23/96	07/20/98	12/15/98	04/13/99	10/23/9/	02/23/96	07/21/96	12/15/98	04/13/99	11/13/01	12/19/01	10/07/02	10/09/03	03/16/04	10/11/04	03/22/05	09/22/05	03/16/06	06/22/06	05/02/11	11/20/14	06/04/10	11/16/15	10/04/16
1,1,2-Trichloroethane	CAO Goal	Office	10 U	2011	2.0 U	0.35 U	200 U	100 U	22	100 U	18 U	0,20 U	0.20 U	0.30 U	0.3011	0.30 U	0.30 U	0.3011	0.30 U	0.30 U	0.30 U	1.0 U	1011	1.0 U	1.0 U	5.0 U
1,1,2-1 nchloroethane 1,2-Dichloroethane	5	ug/L	10 U	2.0 U	2.0 U	0.35 U	1.900	7.200 F	7.100 E	8.400	6.200	0.20 U	0.20 U	0.30 U	3.8	0.30 U	10	0.40	0.30 U	0.30 U	0.30 0	1.0 U	1.0 U	0.30 J	3.7	2.4
Chloroethane	5	ug/L ug/L	NA	NA	NA	NA	1,900 NA	7,200 E NA	7,100 E NA	8,400 NA	6,200 NA	0.20 U	0.20 U	0.40 U	0.50 U	0.30 U	0.40 U	0.40 U	0.30 U	0.30 U	0.70 0.20 U	1.0 U	1.0 U	1.0 U	1.0 U	NA
Chloroform	0.19	ug/L	10 U	2.0 U	2.0 U	0.59 U	200 U	100 U	2.0 U	100 U	30 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.40	0.40 U	0.50 U	0.50 U	0.50 U	1.0 U	0.16 J	0.21 J	0.33 J	1.0 U
	0.19	ug/L	10 U	5.0 U	5.0 U	1.1 U	200 U	45 J	5.0 U	380	56 U	1.0 U	1.0 U	0.20 U	0.80 U	0.20 U	0.40 0.90 U	0.30 U	0.50 U	0.50 U	0.50 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
					3.00					100 U						0.30 U	0.90 U	0.40 U	0.40 U	0.40 U	0.40 U		1.0 U	1.0 U		1.0 U
Methylene Chloride Tetrachloroethene	5	ug/l	10 []	2011	2011	0.6211	200 11	100 II																		
Tetrachloroethene	5	ug/L ug/l	10 U	2.0 U	2.0 U	0.62 U 0.44 U	200 U	100 U	2.0 U 39	100 U	31,000 U 22,000 U	0.30 U 0.40	0.30 U 0.30 U	0.20 U 0.40	0.30 U 0.20		0.40 U					1.0 U		1.0 U	1.0 U	
	5 5	ug/L ug/L ug/L		2.0 U 2.0 U NA	2.0 U 2.0 U NA	0.62 U 0.44 U NA	200 U 200 U NA	100 U 60 J NA	2.0 U 39 NA		22,000 U NA	0.30 U 0.40 NA	0.30 U 0.30 U NA	0.20 U 0.40 NA	0.30 U 0.20 0.20 U	0.20 U NA		0.40 U 0.40 U	0.40 U 0.40 U	0.40 U NA	0.40 U 0.40 U	1.0 U 1.0 U	0.13 J 1.0 U		1.0 U 1.0 U	1.0 U NA
Tetrachloroethene Trichloroethene cis-1,2-Dichloroethene		ug/L ug/L	10 U	2.0 U	2.0 U	0.44 U	200 U	60 J	39	100 U	22,000 U	0.40	0.30 U	0.40	0.20	0.20 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	1.0 U	0.13 J	1.0 U	1.0 U	1.0 U
Tetrachloroethene Trichloroethene		ug/L	10 U NA	2.0 U NA	2.0 U NA	0.44 U NA	200 U NA	60 J NA	39 NA	100 U NA	22,000 U NA	0.40 NA	0.30 U NA	0.40 NA	0.20 0.20 U	0.20 U NA	0.40 U 0.40 U	0.40 U 0.40 U	0.40 U 0.40 U	0.40 U NA	0.40 U 0.40 U	1.0 U 1.0 U	0.13 J 1.0 U	1.0 U	1.0 U 1.0 U	1.0 U NA



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| | S | ample Date: | 10/03/17 | 11/20/18 | 09/20/19 | 10/08/20 | 9/14/2021
 | 09/14/22 | 07/21/98 | 02/25/98
 | 10/23/97 | 02/25/98 | 07/21/98
 | 12/15/98 | 04/13/99 | 11/13/01 | 12/19/01 | 10/07/02 | 10/09/03
 | 03/18/04 | 10/11/04 | 03/22/05 | 09/22/05
 | 03/16/06 | 06/22/06 | 05/02/11 | 11/20/14
 | 06/04/15 |
Volatile Organics	CAO Goal ¹	Units				
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 | |
| 1,1,2-Trichloroethane | 5 | ug/L | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U
 | 1.0 U | 200 U | 1,000 U
 | 10 U | 10 U | 2.0 U
 | 2.0 U | 0.35 U | 0.20 U | 0.20 U | 0.30 U | 0.30 U
 | 0.30 U | 0.30 U | 0.30 U | 0.30 U
 | 0.30 U | 0.30 U | 1.0 U | 1.0 U
 | 1.0 U |
| 1,2-Dichloroethane | 5 | ug/L | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U
 | 1.0 U | 6,000 D | 6,200 D
 | 10 U | 10 U | 2.0 U
 | 2.0 U | 0.21 U | 0.20 U | 0.20 U | 0.40 U | 0.30 U
 | 0.30 U | 0.40 U | 0.40 U | 0.30 U
 | 0.30 U | 0.30 U | 1.0 U | 1.0 U
 | 0.22 J |
| Chloroethane | | ug/L | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 UJ
 | 1.0 U | NA | NA
1 000 II
 | NA | NA
10.11 | NA
 | NA | NA | NA | NA | NA | 0.50 U
 | NA | 0.40 U | 0.40 U | 0.20 U
 | NA . | 0.20 U | 1.0 U | 1.0 U
 | 1.0 U
0.54 J |
| Chloroform
Methylene Chloride | 0.19 | ug/L | 0.72 J
1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U
 | 1.0 U
1.0 U | 200 U
500 U | 1,000 U
1,000 U
 | 10 U | 10 U | 2.0 U
5.0 U
 | 2.0 U
5.0 U | 0.59 U
1.1 U | 0.20 U
1.0 U | 0.20 U
1.0 U | 0.20 U
0.90 U | 0.20 U
0.80 U
 | 0.20 U
0.80 U | 0.30 U
0.90 U | 0.30 U
0.90 U | 0.50 U
0.50 U
 | 0.50 U
0.50 U | 0.50 U
0.50 U | 1.0 U | 0.15 J
1.0 U
 | 1.0 U |
| Tetrachloroethene | 5 | ug/L
ug/L | NA | 1.0 U | NA. | 1.0 U | 1.0 U
 | 1.0 U | 200 U | 1,000 U
 | 10.000 U | 10 U | 2.0 U
 | 2.0 U | 0.62 U | 0.30 U | 0.30 U | 0.20 U | 0.30 U
 | 0.30 U | 0.90 U | 0.40 U | 0.40 U
 | 0.50 U | 0.40 U | 1.0 U | 1.0 U
 | 1.0 U |
| Trichloroethene | 5 | ug/L | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U
 | 1.0 U | 200 U | 1,000 U
 | 10 U | 10 U | 2.00
 | 2.0 U | 0.44 U | 0.30 U | 0.30 U | 0.10 U | 0.20 U
 | 0.20 U | 0.40 U | 0.40 U | 0.40 U
 | 0.40 U | 0.40 U | 1.0 U | 1.0 U
 | 1.0 U |
| cis-1.2-Dichloroethene | | ug/L | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U
 | 1.0 U | NA NA | NA NA
 | NA NA | NA. | NA NA
 | NA NA | NA NA | NA | NA | NA NA | 0.20 U
 | NA
NA | 0.40 U | 0.40 U | 0.40 U
 | NA NA | 0.40 U | 1.0 U | 1.0 U
 | 1.0 U |
| Vinyl Chloride | 2 | ug/L | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U
 | 1.0 U | 200 U | 1,000 U
 | 10 U | 10 U | 2.0 U
 | 2.0 U | 0.71 U | 0.20 U | 0.20 U | 0.30 U | 0.50 U
 | 0.50 U | 0.40 U | 0.40 U | 0.30 U
 | 0.30 U | 0.30 U | 1.0 U | 1.0 U
 | 1.0 U |
| Carbon Disulfide | 1000 | ug/L | NA | 1.0 U | NA | NA | NA
 | 1.0 U | 200 U | 1,000 U
 | 10 U | 10 U | 2.0 U
 | 2.0 U | 0.56 U | 0.20 U | 0.20 U | 0.30 U | 0.20 U
 | 0.20 U | 0.20 U | 0.20 U | 0.30 U
 | 0.30 U | 0.30 U | 1.0 U | 1.0 U
 | 1.0 U |
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| | | ample Date: | 11/16/15 | 10/04/16 | 10/03/17 | 11/20/18 | 09/20/19
 | 10/08/20 | 09/14/21 | 09/14/22
 | 10/24/97 | 02/25/98 | 07/21/98
 | 12/15/98 | 04/13/99 | 11/13/01 | 12/19/01 | 10/07/02 | 03/03/03
 | 10/09/03 | 03/18/04 | 10/11/04 | 03/22/05
 | 03/16/06 | 06/08/06 | 06/22/06 | 05/02/11
 | 11/20/14 |
Volatile Organics	CAO Goal ¹	Units				
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| 1,1,2-Trichloroethane | 5 | ug/L | 1.0 U | 5.0 U | 1.0 U | 1.0 U | 1.0 U
 | 1.0 U | 1.0 U | 1.0 U
 | 190 | 64 J | 110
 | 100 U | 120 | 35 | 27 | 7.0 | 13
 | 82 | 25 | 34 | 18
 | 0.30 U | 12 | 8.6 | 3.5 J
 | 0.94 J |
| 1,2-Dichloroethane | 5 | ug/L | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U
 | 1.0 U | 1.0 U | 1.0 U
 | 9,800 D | 3,900 E | 3,200 E
 | 8,400 | 12,000 D | 2,000 | 2,000 | 760 | 960
 | 4,300 | 1,500 | 2,000 | 1,000
 | 0.30 U | 640 | 420 | 270
 | 130 |
| Chloroethane | | ug/L | 1.0 U | NA | 1.0 U | 1.0 U | 1.0 U
 | 1.0 U | 1.0 U | 1.0 U
 | NA | 100 U | NA
15
 | NA | NA | NA | NA | NA | 4.8 U
 | 12 U | NA
0.0 | 7.4 U | 3.7 U
 | NA | 1.2 U | 1.2 U | 12 U
 | 1.0 U |
| Chloroform | 0.19 | ug/L | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U
 | 1.0 U | 1.0 U | 1.0 U
 | 130 | 100 U | 15
22
 | 100 U | 30 U
56 U | 3.8 U | 3.8 U | 2.5 U | 2.7
 | 16 | 3.9 | 6.8 U | 3.4 U
9.1 U
 | 0.50 U | 2.6 U | 2.6 U | 12 U
 | 0.24 J
1.0 U |
| Methylene Chloride
Tetrachloroethene | 5 | ug/L | 1.0 U | 5.0 U
1.0 U | 1.0 U
NA | 1.0 U | 1.0 U
NA
 | 1.0 U | 1.0 U
NA | 1.0 U
 | 8.0 J | 100 U | 5.0
 | 370
100 U | 31 U | 20 U
5.6 U | 20 U
5.6 U | 8.8 U
2.4 U | 8.8 U
2.5
 | 20 U
7.8 U | 8.1 U
3.2 | 7.2 U | 3.6 U
 | 0.50 U
0.40 U | 2.6 U
3.3 | 2.5 | 12 U
 | 0.98 J |
| | 5 | ug/L | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U
 | 1.0 U | 1.0 U | 1.0 U
 | 500 U | 120 | 5.0
 | 100 U | 110 | 5.6 U | 5.6 U | 2.4 U | 2.5
 | 7.8 U | 3.2 | 7.20 | 3.6 U
 | 0.40 U | 3.3 | 2.5 | 12 0
 | 6.6 |
| Trichloroethene
cis-1,2-Dichloroethene | | ug/L
ug/L | 1.0 U | NA | 1.0 U | 1.0 U | 1.0 U
 | 1.0 U | 1.0 U | 1.0 U
 | NA
NA | NA | NA
 | NA | NA NA | NA
NA | NA
NA | NA | 7.6
 | 24 | NA
NA | 7.1 | 4.6
 | 0.40 G | 5.9 | 5.2 | 12 U
 | 0.56 J |
 | | |
 | | |
 | | | | | |
 | - | | |
 | | | |
 | |
| Vinyl Chloride | 2 | ug/L | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U
 | 1.0 U | 1.0 U | 1.0 U
 | 26 | 100 U | 6.0
 | 100 U | 36 U | 4.6 U | 4.6 U | 2.9 U | 2.9 U
 | 13 U | 5.3 U | 7.0 U | 3.5 U
 | 0.30 U | 1.4 U | 1.4 U | 12 U
 | 1.0 U |
| Carbon Disulfide | 1000 | ug/L | | 1.0 U | NA | 1.0 U | NA
 | NA | NA. | 1.0 U
 | | | | | |
 | | | | | |
 | | | |
 | | | |
 | |
| | 1000 | ug/L | 1.0 U | 1.00 | INA | 1.00 | INA
 | INA | INA | 1.00
 | 10 U | 100 U | 2.0 U
 | 100 U | 28 U | 5.0 U | 5.0 U | 3.0 U | 3.0 U
 | 6.0 U | 2.4 U | 5.0 U | 2.5 U
 | 0.30 U | 1.7 U | 1.7 U | 12 U
 | 1.0 U |
| | | Location ID: | MW-13D | MW-13D | MW-13D | MW-13D | MW-13D
 | MW-13D | MW-13D | MW-13D
 | MW-13D | MW-13DDL | 2.0 U
 | MW-13S | 28 U
MW-13S | 5.0 U | 5.0 U | MW-13S | MW-13S
 | MW-13S | MW-13S | MW-13S | MW-13S
 | 0.30 U | 1.7 U
MW-13S | 1.7 U
MW-13S | 12 U
MW-13S
 | MW-13S |
 | | 1 |
 | | ı |
 | | | | 1 | |
 | | | |
 | | | |
 | |
| Volatile Organics | | Location ID: | MW-13D | MW-13D | MW-13D | MW-13D | MW-13D
 | MW-13D | MW-13D | MW-13D
 | MW-13D | MW-13DDL | MW-13D-DL
 | MW-13S | MW-13S | MW-13S | MW-13S | MW-13S | MW-13S
 | MW-13S | MW-13S | MW-13S | MW-13S
 | MW-13S | MW-13S | MW-13S | MW-13S
 | MW-13S |
| | l
S | Location ID:
ample Date: | MW-13D | MW-13D | MW-13D | MW-13D | MW-13D
 | MW-13D | MW-13D | MW-13D
 | MW-13D | MW-13DDL | MW-13D-DL
 | MW-13S | MW-13S | MW-13S | MW-13S | MW-13S | MW-13S
 | MW-13S | MW-13S | MW-13S | MW-13S
 | MW-13S | MW-13S | MW-13S | MW-13S
 | MW-13S |
| Volatile Organics | l
S | Location ID:
ample Date:
Units | MW-13D
06/04/15 | MW-13D
11/16/15 | MW-13D
10/04/16 | MW-13D
10/03/17 | MW-13D
11/20/18
 | MW-13D
09/20/19 | MW-13D
10/08/20 | MW-13D
9/14/2021
 | MW-13D
09/14/22 | MW-13DDL
07/21/98 | MW-13D-DL
02/25/98
 | MW-13S
10/24/97 | MW-13S
02/25/98 | MW-13S
07/21/98 | MW-13S
12/15/98 | MW-13S
04/13/99 | MW-13S
11/13/01
 | MW-13S
12/19/01 | MW-13S
10/07/02 | MW-13S
03/03/03 | MW-13S
10/09/03
 | MW-13S
03/18/04 | MW-13S
10/11/04 | MW-13S
03/22/05 | MW-13S
09/22/05
 | MW-13S
03/16/06 |
| Volatile Organics
1,1,2-Trichloroethane | CAO Goal ¹ | Location ID:
ample Date:
Units
ug/L | MW-13D
06/04/15 | MW-13D
11/16/15 | MW-13D
10/04/16 | MW-13D
10/03/17 | MW-13D
11/20/18
 | MW-13D
09/20/19 | MW-13D
10/08/20 | MW-13D
9/14/2021
 | MW-13D
09/14/22 | MW-13DDL
07/21/98 | MW-13D-DL
02/25/98
500 U
 | MW-13S
10/24/97 | MW-13S
02/25/98 | MW-13S
07/21/98 | MW-13S
12/15/98 | MW-13S
04/13/99 | MW-13S
11/13/01
 | MW-13S
12/19/01 | MW-13S
10/07/02 | MW-13S
03/03/03
0.30 U | MW-13S
10/09/03
 | MW-13S
03/18/04 | MW-13S
10/11/04 | MW-13S
03/22/05 | MW-13S
09/22/05
 | MW-13S
03/16/06
0.30 U
0.30 U
NA |
| Volatile Organics
1,1,2-Trichloroethane
1,2-Dichloroethane | CAO Goal ¹ | Location ID:
ample Date:
Units
ug/L
ug/L | MW-13D
06/04/15
1.0
7.5
1.0 U
0.35 J | MW-13D
11/16/15
0.98 J
86
1.0 U
0.33 J | MW-13D
10/04/16
5.0 U
4.9
NA
1.0 U | MW-13D
10/03/17
1.0 U
26 | 11/20/18
11/20/18
1.0 U
1.0 U
1.0 U
0.73 J
 | MW-13D
09/20/19
1.8
46
1.0 U
1.0 U | 1.0 U
3.2
1.0 U
1.0 U | MW-13D
9/14/2021
1.9
16
1.0 U
1.0 U
 | MW-13D
09/14/22
1.0 U
22 | MW-13DDL
07/21/98
100 U
5,100 D
NA
100 U | MW-13D-DL
02/25/98
500 U
2,600 D
 | MW-13S
10/24/97
10 U
8.0 J
NA
10 U | MW-13S
02/25/98
10 U
10 U
NA
10 U | MW-13S
07/21/98
2.0 U
2.0 U
NA
2.0 U | MW-13S
12/15/98
2.0 U
2.0 U
NA
2.0 U | MW-13S
04/13/99
0.35 U
0.21 U | MW-13S
11/13/01
0.20 U
0.20 U
NA
0.20 U
 | MW-13S
12/19/01
0.20 U
0.20 U
NA
0.20 U | MW-13S
10/07/02
0.30 U
0.40 U
NA
5.6 | 03/03/03
03/03/03
0.30 U
0.40 U
0.50 U
0.20 U | MW-13S
10/09/03
0.30 U
0.30 U
 | MW-13S
03/18/04
0.30 U
0.30 U
NA
0.40 | MW-13S
10/11/04
0.30 U
0.60
0.40 U
0.60 | MW-13S
03/22/05
0.30 U
0.40 U
0.40 U
0.30 U | MW-13S
09/22/05
0.30 U
0.30 U
0.20 U
1.8
 | 03/16/06
0.30 U
0.30 U
NA
0.50 U |
| Volatile Organics
1,1,2-Trichloroethane
1,2-Dichloroethane
Chloroethane
Chloroform
Methylene Chloride | Si
CAO Goal ¹
5
5 | Location ID:
ample Date:
Units
ug/L
ug/L
ug/L
ug/L
ug/L | MW-13D
06/04/15
1.0
7.5
1.0 U
0.35 J
1.0 U | MW-13D
11/16/15
0.98 J
86
1.0 U
0.33 J
1.0 U | 5.0 U 5.0 U 5.0 U | 1.0 U
26
1.0 U
1.0 U
1.0 U | 1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
 | MW-13D
09/20/19
1.8
46
1.0 U
1.0 U
1.0 U | 1.0 U
3.2
1.0 U
1.0 U
1.0 U
1.0 U | MW-13D
9/14/2021
1.9
16
1.0 U
1.0 U
 | MW-13D
09/14/22
1.0 U
22
1.0 U
1.0 U
1.0 U | MW-13DDL
07/21/98
100 U
5,100 D
NA
100 U
250 U | MW-13D-DL
02/25/98
500 U
2,600 D
NA
500 U
500 U
 | MW-13S
10/24/97
10 U
8.0 J
NA
10 U
10 U | MW-13S
02/25/98
10 U
10 U
NA
10 U
10 U | MW-13S
07/21/98
2.0 U
2.0 U
NA
2.0 U
5.0 U | MW-13S
12/15/98
2.0 U
2.0 U
NA
2.0 U
7.0 | MW-13S
04/13/99
0.35 U
0.21 U
NA
0.59 U
1.1 U | MW-13S
11/13/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
 | MW-13S
12/19/01
0.20 U
0.20 U
NA
0.20 U
1.0 U | MW-13S
10/07/02
0.30 U
0.40 U
NA
5.6
0.90 U | 0.30 U
0.40 U
0.50 U
0.20 U
0.90 U | MW-13S
10/09/03
0.30 U
0.30 U
0.50 U
0.20 U
0.80 U
 | MW-13S
03/18/04
0.30 U
0.30 U
NA
0.40
0.80 U | MW-13S
10/11/04
0.30 U
0.60
0.40 U
0.60
0.90 U | 03/22/05
03/22/05
0.30 U
0.40 U
0.40 U
0.30 U
0.90 U | MW-13S
09/22/05
0.30 U
0.30 U
0.20 U
1.8
0.50 U
 | MW-13S
03/16/06
0.30 U
0.30 U
NA
0.50 U
0.50 U |
| Volatilo Organics 1,1,2-Trichloroethane 1,2-Dichloroethane Chioroethane Chioroethane Methylene Chloride Tetrachloroethene | Si
CAO Goal ¹
5
5 | Location ID:
ample Date:
Units
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L | MW-13D
06/04/15
1.0
7.5
1.0 U
0.35 J
1.0 U
1.0 | MW-13D
11/16/15
0.98 J
86
1.0 U
0.33 J | 5.0 U
4.9
NA
1.0 U
5.0 U | 1.0 U
26
1.0 U
1.0 U
1.0 U
1.0 U | 1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
 | 1.8
46
1.0 U
1.0 U
NA | 1.0 U
3.2
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U | 1.9
16
1.0 U
1.0 U
NA
 | MW-13D
09/14/22
1.0 U
22
1.0 U
1.0 U
1.0 U
0.79 J | MW-13DDL
07/21/98
100 U
5,100 D
NA
100 U
250 U
100 U | MW-13D-DL
02/25/98
500 U
2,600 D
NA
500 U
500 U
 | MW-13S
10/24/97
10 U
8.0 J
NA
10 U
10 U
10 U | MW-13S
02/25/98
10 U
10 U
NA
10 U
10 U
10 U | MW-13S
07/21/98
2.0 U
2.0 U
NA
2.0 U
5.0 U
2.0 U | MW-13S
12/15/98
2.0 U
2.0 U
NA
2.0 U
7.0
2.0 U | MW-13S
04/13/99
0.35 U
0.21 U
NA
0.59 U
1.1 U
0.62 U | MW-13S
11/13/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.20 U
 | MW-13S
12/19/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U | MW-13S
10/07/02
0.30 U
0.40 U
NA
5.6
0.90 U
0.20 U | 0.30 U
0.40 U
0.50 U
0.20 U
0.20 U | MW-13S
10/09/03
0.30 U
0.30 U
0.50 U
0.20 U
0.80 U
0.30 U
 | MW-13S
03/18/04
0.30 U
0.30 U
NA
0.40
0.80 U
0.30 U | MW-13S
10/11/04
0.30 U
0.60
0.40 U
0.90 U
0.40 U | 0.30 U
0.40 U
0.40 U
0.30 U
0.40 U
0.30 U
0.90 U
0.40 U | 0.30 U
0.30 U
0.20 U
0.20 U
1.8
0.50 U
0.40 U
 | 0.30 U
0.30 U
0.30 U
NA
0.50 U
0.50 U
0.40 U |
| Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chioroethane Chioroform Methylene Chloride Tetrachloroethene Trichloroethene | Si
CAO Goal ¹
5
5 | Location ID:
ample Date:
Units
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L | MW-13D
06/04/15
1.0
7.5
1.0 U
0.35 J
1.0 U
1.0
7.0 | MW-13D
11/16/15
0.98 J
86
1.0 U
0.33 J
1.0 U
0.95 J
7.2 | MW-13D
10/04/16
5.0 U
4.9
NA
1.0 U
5.0 U
1.0 U | MW-13D
10/03/17
1.0 U
26
1.0 U
1.0 U
1.0 U
NA
3.2 | MW-13D
11/20/18
1.0 U
1.0 U
1.0 U
0.73 J
1.0 U
1.0 U
 | MW-13D
09/20/19
1.8
46
1.0 U
1.0 U
1.0 U
NA
7.9 | MW-13D
10/08/20
1.0 U
3.2
1.0 U
1.0 U
1.0 U
1.0 U | MW-13D
9/14/2021
1.9
16
1.0 U
1.0 U
1.0 U
NA
2.8
 | MW-13D
09/14/22
1.0 U
22
1.0 U
1.0 U
1.0 U
0.79 J
3.0 | MW-13DDL
07/21/98
100 U
5,100 D
NA
100 U
250 U
100 U | MW-13D-DL
02/25/98
500 U
2,600 D
NA
500 U
500 U
500 U
 | MW-13S
10/24/97
10 U
8.0 J
NA
10 U
10 U
10 U | MW-13S
02/25/98
10 U
10 U
NA
10 U
10 U
10 U | MW-13S
07/21/98
2.0 U
2.0 U
NA
2.0 U
5.0 U
2.0 U
2.0 U | MW-13S
12/15/98
2.0 U
2.0 U
NA
2.0 U
7.0
2.0 U
2.0 U | MW-13S
04/13/99
0.35 U
0.21 U
NA
0.59 U
1.1 U
0.62 U
0.44 U | MW-13S
11/13/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.20 U
 | MW-13S
12/19/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U
0.30 U | MW-13S
10/07/02
0.30 U
0.40 U
NA
5.6
0.90 U
0.20 U
0.10 U | 0.30 U
0.40 U
0.50 U
0.20 U
0.90 U
0.20 U
0.10 U | MW-13S
10/09/03
0.30 U
0.30 U
0.50 U
0.20 U
0.80 U
0.30 U
0.20 U
 | MW-13S
03/18/04
0.30 U
0.30 U
NA
0.40
0.80 U
0.30 U
0.20 U | MW-13S
10/11/04
0.30 U
0.60
0.40 U
0.60
0.90 U
0.40 U
0.40 U | MW-13S
03/22/05
0.30 U
0.40 U
0.40 U
0.30 U
0.90 U
0.40 U
0.40 U | 0.30 U
0.30 U
0.30 U
0.20 U
1.8
0.50 U
0.40 U
 | 0.30 U
0.30 U
0.30 U
NA
0.50 U
0.50 U
0.40 U |
| Volatilo Organics 1,1,2-Trichloroethane 1,2-Dichloroethane Chiloroethane Chiloroethane Chiloroethane Tetrachloroethene Trichloroethene 5:1,2-Dichloroethene | Si
CAO Goal ¹
5
5 | Location ID:
ample Date:
Units
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L | MW-13D
06/04/15
1.0
7.5
1.0 U
0.35 J
1.0 U
1.0
7.0
0.58 J | MW-13D
11/16/15
0.98 J
86
1.0 U
0.33 J
1.0 U
0.95 J
7.2
1.0 U | 5.0 U
4.9
NA
1.0 U
5.0 U
1.0 U
1.8 NA | MW-13D
10/03/17
1.0 U
26
1.0 U
1.0 U
1.0 U
NA
3.2
1.0 U | 1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
 | MW-13D
09/20/19
1.8
46
1.0 U
1.0 U
1.0 U
NA
7.9
1.0 U | 1.0 U
3.2
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U | MW-13D
9/14/2021
1.9
16
1.0 U
1.0 U
1.0 U
NA
2.8
1.0 U
 | MW-13D
09/14/22
1.0 U
22
1.0 U
1.0 U
1.0 U
0.79 J
3.0
1.0 U | MW-13DDL
07/21/98
100 U
5,100 D
NA
100 U
250 U
100 U
100 U
NA | MW-13D-DL
02/25/98
500 U
2,600 D
NA
500 U
500 U
500 U
500 U
NA
 | MW-13S
10/24/97
10 U
8.0 J
NA
10 U
10 U
10 U
10 U
NA | MW-13S
02/25/98
10 U
10 U
NA
10 U
10 U
10 U
10 U | MW-13S
07/21/98
2.0 U
2.0 U
NA
2.0 U
5.0 U
2.0 U
2.0 U
NA | MW-13S
12/15/98
2.0 U
2.0 U
NA
2.0 U
7.0
2.0 U
2.0 U
NA | MW-13S
04/13/99
0.35 U
0.21 U
NA
0.59 U
1.1 U
0.62 U
0.44 U
NA | MW-13S
11/13/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.20 U
0.20 U
0.20 U
 | MW-13S
12/19/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U
0.30 U
NA | MW-13S
10/07/02
0.30 U
0.40 U
NA
5.6
0.90 U
0.20 U
0.10 U
NA | MW-13S
03/03/03
0.30 U
0.40 U
0.50 U
0.20 U
0.90 U
0.20 U
0.10 U
0.30 U | MW-13S
10/09/03
0.30 U
0.30 U
0.50 U
0.20 U
0.80 U
0.30 U
0.20 U
 | MW-13S
03/18/04
0.30 U
0.30 U
NA
0.40
0.80 U
0.30 U
0.20 U
NA | MW-13S
10/11/04
0.30 U
0.60
0.40 U
0.60
0.90 U
0.40 U
0.40 U
0.40 U | 0.30 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U | 0.30 U
0.30 U
0.30 U
0.20 U
1.8
0.50 U
0.40 U
0.40 U
 | MW-13S
03/16/06
0.30 U
0.30 U
NA
0.50 U
0.50 U
0.40 U
0.40 U |
| Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chioroethane Chioroform Methylene Chloride Tetrachloroethene Trichloroethene ids-1,2-Dichloroethene Virry Chloride | Si
CAO Goal ¹
5
5

0.19
5
5
5
5
2 | Location ID:
ample Date:
Units
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L | MW-13D
06/04/15
1.0
7.5
1.0 U
0.35 J
1.0 U
1.0
7.0
0.58 J
1.0 U | MW-13D
11/16/15
86
1.0 U
0.33 J
1.0 U
0.95 J
7.2
1.0 U
0.14 J | MW-13D
10/04/16
5.0 U
4.9
NA
1.0 U
5.0 U
1.0 U
1.8
NA | MW-13D
10/03/17
1.0 U
26
1.0 U
1.0 U
1.0 U
NA
3.2
1.0 U | MW-13D
11/20/18
1.0 U
1.0 U
1.0 U
0.73 J
1.0 U
1.0 U
1.0 U
1.0 U
 | MW-13D
09/20/19
1.8
46
1.0 U
1.0 U
1.0 U
NA
7.9
1.0 U | 1.0 U
3.2
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U | MW-13D
9/14/2021
1.9
16
1.0 U
1.0 U
1.0 U
NA
2.8
1.0 U
1.0 U
 | MW-13D
09/14/22
1.0 U
22
1.0 U
1.0 U
1.0 U
0.79 J
3.0
1.0 U | MW-13DDL
07/21/98
100 U
5,100 D
NA
100 U
250 U
100 U
100 U
100 U | MW-13D-DL
02/25/98
500 U
2,600 D
NA
500 U
500 U
500 U
500 U
500 U
 | MW-13S
10/24/97
10 U
8.0 J
NA
10 U
10 U
10 U
10 U
10 U
NA | MW-13S
02/25/98
10 U
10 U
NA
10 U
10 U
10 U
10 U
NA | MW-13S
07/21/98
2.0 U
2.0 U
NA
2.0 U
5.0 U
2.0 U
2.0 U
2.0 U
2.0 U | MW-13S
12/15/98
2.0 U
2.0 U
NA
2.0 U
7.0
2.0 U
2.0 U
NA
2.0 U | MW-13S
04/13/99
0.35 U
0.21 U
NA
0.59 U
1.1 U
0.62 U
0.44 U
NA
0.71 U | MW-13S
11/13/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.20 U
0.20 U
0.20 U
 | MW-13S
12/19/01
0.20 U
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U
0.30 U
0.30 U | MW-13S
10/07/02
0.30 U
0.40 U
NA
5.6
0.90 U
0.20 U
0.10 U
NA | MW-13S
03/03/03
0.30 U
0.40 U
0.50 U
0.20 U
0.20 U
0.20 U
0.10 U
0.30 U
0.30 U | MW-13S
10/09/03
0.30 U
0.50 U
0.20 U
0.20 U
0.30 U
0.30 U
0.20 U
0.20 U
0.20 U
 | MW-13S
03/18/04
0.30 U
0.30 U
NA
0.40
0.80 U
0.30 U
0.20 U
NA | MW-13S
10/11/04
0.30 U
0.60
0.40 U
0.60
0.90 U
0.40 U
0.40 U
0.40 U
0.40 U | MW-13S
03/22/05
0.30 U
0.40 U
0.30 U
0.30 U
0.90 U
0.40 U
0.40 U
0.40 U
0.40 U | MW-13S
09/22/05
0.30 U
0.30 U
0.20 U
1.8
0.50 U
0.40 U
0.40 U
0.40 U
0.30 U
 | MW-13S
03/16/06
0.30 U
0.30 U
NA
0.50 U
0.50 U
0.40 U
0.40 U
0.40 U
0.30 U |
| Volatilo Organics 1,1,2-Trichloroethane 1,2-Dichloroethane Chiloroethane Chiloroethane Chiloroethane Tetrachloroethene Trichloroethene 5:1,2-Dichloroethene | Si
CAO Goal ¹
5
5 | Location ID:
ample Date:
Units
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L | MW-13D
06/04/15
1.0
7.5
1.0 U
0.35 J
1.0 U
1.0
7.0
0.58 J | MW-13D
11/16/15
0.98 J
86
1.0 U
0.33 J
1.0 U
0.95 J
7.2
1.0 U | 5.0 U
4.9
NA
1.0 U
5.0 U
1.0 U
1.8 NA | MW-13D
10/03/17
1.0 U
26
1.0 U
1.0 U
1.0 U
NA
3.2
1.0 U | 1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
 | MW-13D
09/20/19
1.8
46
1.0 U
1.0 U
1.0 U
NA
7.9
1.0 U | 1.0 U
3.2
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U | MW-13D
9/14/2021
1.9
16
1.0 U
1.0 U
1.0 U
NA
2.8
1.0 U
 | MW-13D
09/14/22
1.0 U
22
1.0 U
1.0 U
1.0 U
0.79 J
3.0
1.0 U | MW-13DDL
07/21/98
100 U
5,100 D
NA
100 U
250 U
100 U
100 U
NA | MW-13D-DL
02/25/98
500 U
2,600 D
NA
500 U
500 U
500 U
500 U
NA
 | MW-13S
10/24/97
10 U
8.0 J
NA
10 U
10 U
10 U
10 U
NA | MW-13S
02/25/98
10 U
10 U
NA
10 U
10 U
10 U
10 U | MW-13S
07/21/98
2.0 U
2.0 U
NA
2.0 U
5.0 U
2.0 U
2.0 U
NA | MW-13S
12/15/98
2.0 U
2.0 U
NA
2.0 U
7.0
2.0 U
2.0 U
NA | MW-13S
04/13/99
0.35 U
0.21 U
NA
0.59 U
1.1 U
0.62 U
0.44 U
NA | MW-13S
11/13/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.20 U
0.20 U
0.20 U
 | MW-13S
12/19/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U
0.30 U
NA | MW-13S
10/07/02
0.30 U
0.40 U
NA
5.6
0.90 U
0.20 U
0.10 U
NA | MW-13S
03/03/03
0.30 U
0.40 U
0.50 U
0.20 U
0.90 U
0.20 U
0.10 U
0.30 U | MW-13S
10/09/03
0.30 U
0.30 U
0.50 U
0.20 U
0.80 U
0.30 U
0.20 U
 | MW-13S
03/18/04
0.30 U
0.30 U
NA
0.40
0.80 U
0.30 U
0.20 U
NA | MW-13S
10/11/04
0.30 U
0.60
0.40 U
0.60
0.90 U
0.40 U
0.40 U
0.40 U | 0.30 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U | 0.30 U
0.30 U
0.30 U
0.20 U
1.8
0.50 U
0.40 U
0.40 U
 | MW-13S
03/16/06
0.30 U
0.30 U
NA
0.50 U
0.50 U
0.40 U
0.40 U |
| Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chioroethane Chioroform Methylene Chloride Tetrachloroethene Trichloroethene ids-1,2-Dichloroethene Virry Chloride | S: CAO Goal 5 5 0.19 5 5 5 1000 | Location ID:
ample Date:
Units
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L | MW-13D
06/04/15
1.0
7.5
1.0 U
0.35 J
1.0 U
1.0
7.0
0.58 J
1.0 U | MW-13D
11/16/15
86
1.0 U
0.33 J
1.0 U
0.95 J
7.2
1.0 U
0.14 J | MW-13D
10/04/16
5.0 U
4.9
NA
1.0 U
5.0 U
1.0 U
1.8
NA | MW-13D
10/03/17
1.0 U
26
1.0 U
1.0 U
1.0 U
NA
3.2
1.0 U | MW-13D
11/20/18
1.0 U
1.0 U
1.0 U
0.73 J
1.0 U
1.0 U
1.0 U
1.0 U
 | MW-13D
09/20/19
1.8
46
1.0 U
1.0 U
1.0 U
NA
7.9
1.0 U | 1.0 U
3.2
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U | MW-13D
9/14/2021
1.9
16
1.0 U
1.0 U
1.0 U
NA
2.8
1.0 U
1.0 U
 | MW-13D
09/14/22
1.0 U
22
1.0 U
1.0 U
1.0 U
0.79 J
3.0
1.0 U | MW-13DDL
07/21/98
100 U
5,100 D
NA
100 U
250 U
100 U
100 U
100 U | MW-13D-DL
02/25/98
500 U
2,600 D
NA
500 U
500 U
500 U
500 U
500 U
 | MW-13S
10/24/97
10 U
8.0 J
NA
10 U
10 U
10 U
10 U
10 U
NA | MW-13S
02/25/98
10 U
10 U
NA
10 U
10 U
10 U
10 U
NA | MW-13S
07/21/98
2.0 U
2.0 U
NA
2.0 U
5.0 U
2.0 U
2.0 U
2.0 U
2.0 U | MW-13S
12/15/98
2.0 U
2.0 U
NA
2.0 U
7.0
2.0 U
2.0 U
NA
2.0 U | MW-13S
04/13/99
0.35 U
0.21 U
NA
0.59 U
1.1 U
0.62 U
0.44 U
NA
0.71 U | MW-13S
11/13/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.20 U
0.20 U
0.20 U
 | MW-13S
12/19/01
0.20 U
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U
0.30 U
0.30 U | MW-13S
10/07/02
0.30 U
0.40 U
NA
5.6
0.90 U
0.20 U
0.10 U
NA | MW-13S
03/03/03
0.30 U
0.40 U
0.50 U
0.20 U
0.20 U
0.20 U
0.10 U
0.30 U
0.30 U | MW-13S
10/09/03
0.30 U
0.50 U
0.20 U
0.20 U
0.30 U
0.30 U
0.20 U
0.20 U
0.20 U
 | MW-13S
03/18/04
0.30 U
0.30 U
NA
0.40
0.80 U
0.30 U
0.20 U
NA | MW-13S
10/11/04
0.30 U
0.60
0.40 U
0.60
0.90 U
0.40 U
0.40 U
0.40 U
0.40 U | MW-13S
03/22/05
0.30 U
0.40 U
0.30 U
0.30 U
0.90 U
0.40 U
0.40 U
0.40 U
0.40 U | MW-13S
09/22/05
0.30 U
0.30 U
0.20 U
1.8
0.50 U
0.40 U
0.40 U
0.40 U
0.30 U
 | MW-13S
03/16/06
0.30 U
0.30 U
NA
0.50 U
0.50 U
0.40 U
0.40 U
0.40 U
0.30 U |
| Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chioroethane Chioroform Methylene Chloride Tetrachloroethene Trichloroethene ids-1,2-Dichloroethene Virry Chloride | S. CAO Goal ¹ 5 5 5 0.19 6 6 5 1000 | Location ID:
ample Date:
Units
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L | MW-13D
06/04/15
1.0
7.5
1.0 U
0.35 J
1.0 U
1.0
0.58 J
1.0 U
1.0 U | MW-13D
11/16/15
0.98 J
86
1.0 U
0.95 J
7.2
1.0 U
0.14 J
1.0 U | MW-13D
10/04/16
5.0 U
4.9
NA
1.0 U
5.0 U
1.0 U
1.8
NA
1.0 U | MW-13D
10/03/17
1.0 U
26
1.0 U
1.0 U
1.0 U
NA
3.2
1.0 U
1.0 U
NA | MW-13D
11/20/18
1.0 U
1.0 U
1.0 U
0.73 J
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
 | MW-13D
09/20/19
1.8
46
1.0 U
1.0 U
1.0 U
NA
7.9
1.0 U
1.0 U
NA | MW-13D
10/08/20
1.0 U
3.2
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
NA | MW-13D
9/14/2021
1.9
16
1.0 U
1.0 U
1.0 U
NA
2.8
1.0 U
NA
 | MW-13D
09/14/22
1.0 U
22
1.0 U
1.0 U
1.0 U
0.79 J
3.0
1.0 U
1.0 U | MW-13DDL
07/21/98
100 U
5,100 D
NA
100 U
250 U
100 U
100 U
NA
100 U | MW-13D-DL
02/25/98
500 U
2,600 D
NA
500 U
500 U
500 U
500 U
NA
500 U
500 U
500 U
 | MW-13S
10/24/97
10 U
8.0 J
NA
10 U
10 U
10 U
10 U
NA
10 U
NA | MW-13S
02/25/98
10 U
10 U
NA
10 U
10 U
10 U
10 U
10 U
10 U
10 U
10 U | MW-13S
07/21/98
2.0 U
2.0 U
NA
2.0 U
5.0 U
2.0 U
2.0 U
2.0 U
2.0 U
2.0 U
2.0 U | MW-13S
12/15/98
2.0 U
2.0 U
NA
2.0 U
7.0
2.0 U
2.0 U
NA
2.0 U
2.0 U
2.0 U | MW-13S
04/13/99
0.35 U
0.21 U
NA
0.59 U
1.1 U
0.62 U
0.44 U
NA
0.71 U
0.56 U | MW-138
11/13/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.20 U
0.20 U
0.20 U
0.20 U
0.20 U
0.20 U
 | MW-13S
12/19/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U
0.30 U
NA
0.20 U
0.20 U | MW-13S
10/07/02
0.30 U
0.40 U
NA
5.6
0.90 U
0.20 U
0.10 U
NA
0.30 U
0.30 U | MW-13S
03/03/03
0.30 U
0.40 U
0.50 U
0.20 U
0.90 U
0.20 U
0.10 U
0.30 U
0.30 U | MW-13S
10/09/03
0.30 U
0.30 U
0.50 U
0.20 U
0.80 U
0.30 U
0.20 U
0.20 U
0.20 U
0.20 U
0.20 U
 | MW-13S
03/18/04
0.30 U
0.30 U
NA
0.40
0.80 U
0.30 U
0.20 U
NA
0.50 U | MW-13S
10/11/04
0.30 U
0.60
0.40 U
0.80
0.90 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U | MW-13S
03/22/05
0.30 U
0.40 U
0.40 U
0.30 U
0.90 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U | MW-13S
09/22/05
0.30 U
0.30 U
0.20 U
1.8
0.50 U
0.40 U
0.40 U
0.40 U
0.30 U
0.30 U
 | MW-13S
03/16/06
0.30 U
0.30 U
NA
0.50 U
0.40 U
0.40 U
NA
0.30 U
NA |
| Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chioroethane Chioroform Methylene Chloride Tetrachloroethene Trichloroethene ids-1,2-Dichloroethene Virry Chloride | S. CAO Goal ¹ 5 5 5 0.19 6 6 5 1000 | Location ID:
ample Date:
Units
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L | MW-13D 06/04/15 1.0 7.5 1.0 U 0.35 J 1.0 U 7.0 0.58 J 1.0 U 1.0 U MW-13S | MW-13D
11/16/15
0.98 J
86
1.0 U
0.33 J
1.0 U
0.95 J
7.2
1.0 U
0.14 J
1.0 U | MW-13D
10/04/16
5.0 U
4.9
NA
1.0 U
5.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
MW-14 | MW-13D
10/03/17
1.0 U
26
1.0 U
1.0 U
1.0 U
NA
3.2
1.0 U
NA
3.2
1.0 U | MW-13D
11/20/18
1.0 U
1.0 U
1.0 U
0.73 J
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
 | MW-13D
09/20/19
1.8
46
1.0 U
1.0 U
1.0 U
NA
7.9
1.0 U
1.0 U
NA | MW-13D
10/08/20
1.0 U
3.2
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
NA | MW-13D
9/14/2021
1.9
16
1.0 U
1.0 U
NA
2.8
1.0 U
1.0 U
NA
 | MW-13D
09/14/22
1.0 U
22
1.0 U
1.0 U
0.79 J
3.0
1.0 U
1.0 U
1.0 U | MW-13DDL 07/21/98 100 U 5,100 D NA 100 U 250 U 100 U 100 U NA 100 U MW-14 | MW-13D-DL
02/25/98
500 U
2,600 D
NA
500 U
500 U
500 U
500 U
500 U
NA
500 U
MW-14
 | MW-13S
10/24/97
10 U
8.0 J
NA
10 U
10 U
10 U
10 U
NA
10 U
MW-14 | MW-13S
02/25/98
10 U
10 U
NA
10 U
10 U
10 U
10 U
NA
10 U
MW-14 | MW-13S
07/21/98
2.0 U
2.0 U
NA
2.0 U
5.0 U
2.0 U
2.0 U
2.0 U
2.0 U
2.0 U
MW-14 | MW-13S
12/15/98
2.0 U
2.0 U
NA
2.0 U
2.0 U
2.0 U
2.0 U
2.0 U
2.0 U
2.0 U
MW-14 | MW-13S 04/13/99 0.35 U 0.21 U NA 0.59 U 1.1 U 0.62 U 0.44 U NA 0.71 U 0.56 U | MW-13S
11/13/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.20 U
0.20 U
0.20 U
0.20 U
0.20 U
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0.20 U
 | MW-13S
12/19/01
0.20 U
0.20 U
NA
0.20 U
0.30 U
0.30 U
0.30 U
0.30 U
0.20 U
0.20 U
0.20 U | MW-13S
10/07/02
0.30 U
0.40 U
NA
5.6
0.90 U
0.20 U
0.10 U
NA
0.30 U
0.30 U | MW-13S
03/03/03
0.30 U
0.40 U
0.50 U
0.20 U
0.20 U
0.10 U
0.30 U
0.30 U
0.30 U
0.30 U | MW-13S
10/09/03
0.30 U
0.30 U
0.50 U
0.20 U
0.80 U
0.30 U
0.20 U
0.20 U
0.50 U
0.20 U
0.50 U
 | MW-13S
03/18/04
0.30 U
0.30 U
NA
0.40
0.80 U
0.30 U
0.20 U
NA
0.50 U
0.20 U
MW-14 | MW-13S
10/11/04
0.30 U
0.60
0.40 U
0.60
0.90 U
0.40 U
0.40 U
0.40 U
0.40 U
0.20 U | MW-13S
03/22/05
0.30 U
0.40 U
0.40 U
0.30 U
0.90 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U | MW-13S
09/22/05
0.30 U
0.30 U
0.20 U
1.8
0.50 U
0.40 U
0.40 U
0.40 U
0.30 U
0.30 U
 | MW-13S
03/16/06
0.30 U
0.30 U
NA
0.50 U
0.50 U
0.40 U
0.40 U
NA
0.30 U
0.30 U
MW-14 |
| Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chloroethane Chloroethane Chloroethane Chloroethene Trichloroethene Trichloroethene Trichloroethene Organical Chloroethene Organical Chloroeth | S: CAO Goal 5 5 5 5 5 5 5 5 5 | Location ID: ample Date: Units ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L | MW-13D 06/04/15 1.0 7.5 1.0 U 0.35 J 1.0 U 7.0 0.58 J 1.0 U 1.0 U MW-13S | MW-13D
11/16/15
0.98 J
86
1.0 U
0.33 J
1.0 U
0.95 J
7.2
1.0 U
0.14 J
1.0 U | MW-13D
10/04/16
5.0 U
4.9
NA
1.0 U
5.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
MW-14 | MW-13D
10/03/17
1.0 U
26
1.0 U
1.0 U
1.0 U
NA
3.2
1.0 U
NA
3.2
1.0 U | MW-13D
11/20/18
1.0 U
1.0 U
1.0 U
0.73 J
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
 | MW-13D
09/20/19
1.8
46
1.0 U
1.0 U
1.0 U
NA
7.9
1.0 U
1.0 U
NA | MW-13D
10/08/20
1.0 U
3.2
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
NA | MW-13D
9/14/2021
1.9
16
1.0 U
1.0 U
NA
2.8
1.0 U
1.0 U
NA
 | MW-13D
09/14/22
1.0 U
22
1.0 U
1.0 U
0.79 J
3.0
1.0 U
1.0 U
1.0 U | MW-13DDL 07/21/98 100 U 5,100 D NA 100 U 250 U 100 U 100 U NA 100 U MW-14 | MW-13D-DL
02/25/98
500 U
2,600 D
NA
500 U
500 U
500 U
500 U
500 U
NA
500 U
MW-14
 | MW-13S
10/24/97
10 U
8.0 J
NA
10 U
10 U
10 U
10 U
NA
10 U
MW-14 | MW-13S
02/25/98
10 U
10 U
NA
10 U
10 U
10 U
10 U
NA
10 U
MW-14 | MW-13S
07/21/98
2.0 U
2.0 U
NA
2.0 U
5.0 U
2.0 U
2.0 U
2.0 U
2.0 U
2.0 U
MW-14 | MW-13S
12/15/98
2.0 U
2.0 U
NA
2.0 U
2.0 U
2.0 U
2.0 U
2.0 U
2.0 U
2.0 U
MW-14 | MW-13S 04/13/99 0.35 U 0.21 U NA 0.59 U 1.1 U 0.62 U 0.44 U NA 0.71 U 0.56 U | MW-13S
11/13/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.20 U
0.20 U
0.20 U
0.20 U
0.20 U
0.20 U
0.20 U
 | MW-13S
12/19/01
0.20 U
0.20 U
NA
0.20 U
0.30 U
0.30 U
0.30 U
0.30 U
0.20 U
0.20 U
0.20 U | MW-13S
10/07/02
0.30 U
0.40 U
NA
5.6
0.90 U
0.20 U
0.10 U
NA
0.30 U
0.30 U | MW-13S
03/03/03
0.30 U
0.40 U
0.50 U
0.20 U
0.20 U
0.10 U
0.30 U
0.30 U
0.30 U
0.30 U | MW-13S
10/09/03
0.30 U
0.30 U
0.50 U
0.20 U
0.80 U
0.30 U
0.20 U
0.20 U
0.50 U
0.20 U
0.50 U
 | MW-13S
03/18/04
0.30 U
0.30 U
NA
0.40
0.80 U
0.30 U
0.20 U
NA
0.50 U
0.20 U
MW-14 | MW-13S
10/11/04
0.30 U
0.60
0.40 U
0.60
0.90 U
0.40 U
0.40 U
0.40 U
0.40 U
0.20 U | MW-13S
03/22/05
0.30 U
0.40 U
0.40 U
0.30 U
0.90 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U | MW-13S
09/22/05
0.30 U
0.30 U
0.20 U
1.8
0.50 U
0.40 U
0.40 U
0.40 U
0.30 U
0.30 U
 | MW-13S
03/16/06
0.30 U
0.30 U
NA
0.50 U
0.50 U
0.40 U
0.40 U
NA
0.30 U
0.30 U
MW-14 |
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chloroothane Chloroothane Chlorotorm Methylene Chloride Tetrachloroethene Trichloroethene cis-1,2-Dichloroethene Viryl Chloride Carbon Disulfide	S: CAO Goal 5 5 5 5 5 5 5 5 5	Location ID: ample Date: Units ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	MW-13D 06/04/15 1.0 7.5 1.0 U 0.35 J 1.0 U 7.0 7.0 7.0 1.0 U 1.0	MW-13D 11/16/15 0.98 J 86 1.0 U 0.33 J 1.0 U 0.95 J 7.2 1.0 U 0.14 J 1.0 U MW-14 10/22/97	MW-13D 10/04/16 5.0 U 4.9 NA 1.0 U 5.0 U 1.0 U 1	MW-13D 10/03/17 1.0 U 26 1.0 U 1.0 U 1.0 U NA 3.2 1.0 U NA 4.0 U NA 07/22/98	MW-13D 11/20/18 1.0 U 1.0 U 1.	MW-13D 09/20/19 1.8 46 1.0 U 1.0 U 1.0 U NA 7.9 1.0 U NA 04/13/99 7.0 U 2,300	MW-13D 10/08/20 1.0 U 3.2 1.0 U	MW-13D 9/14/2021 1.9 16 1.0 U 1.0 U 1.0 U NA 2.8 1.0 U 1.0 U NA 4.10 U NA 4.11 U NA MW-14 12/19/01	MW-13D 09/14/22 1.0 U 22 1.0 U	MW-13DDL 07/21/98 100 U 5,100 D NA 100 U 250 U 100 U 100 U 100 U 100 U 100 U 100 U 104 U 104 U 105 U 106 U 107 U 107 U 108 U 109 U	MW-13D-DL 02/25/98 500 U 2,600 D NA 500 U 500 U 500 U 500 U 500 U MW-14 12/19/02	MW-13S 10/24/97 10 U 8.0 J NA 10 U 10 U 10 U 10 U 10 U 10 U 10 U 10 U	MW-13S 02/25/98 10 U 10 U NA 10 U 10 U 10 U 10 U 10 U 10 U 10 U 10 U	MW-13S 07/21/98 2.0 U 2.0 U NA 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 3.0 U 2.0 U 3.0 U 3.0 U 3.0 U 3.0 U 3.0 U 3.0 U 4.0 U 4.0 U 4.0 U 5.0 U	MW-13S 12/15/98 2.0 U 2.0 U NA 2.0 U 7.0 2.0 U 2.0 U 2.0 U 4.0 U 2.0 U 4.0 U 4	MW-13S 04/13/99 0.35 U 0.21 U NA 0.59 U 1.1 U 0.62 U 0.44 U NA 0.71 U 0.56 U MW-14 03/23/05	MW-13S 11/13/01 0.20 U 0.20 U NA 0.20 U 1.0 U 0.20 U 0.20 U 0.20 U 0.20 U 0.20 U 0.20 U 0.20 U 0.30 U 0.30 U 0.30 U	MW-13S 12/19/01 0.20 U 0.20 U NA 0.20 U 1.0 U 0.30 U 0.30 U 0.30 U 0.20 U 0.20 U 0.30 U	MW-13S 10/07/02 0.30 U 0.40 U NA 5.6 0.90 U 0.10 U NA 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U	MW-13S 03/03/03 0.30 U 0.40 U 0.50 U 0.50 U 0.90 U 0.10 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U	MW-13S 10/09/03 0.30 U 0.50 U 0.50 U 0.50 U 0.80 U 0.20 U 0.20 U 0.50 U 0.20 U 0.50 U 0.20 U 0.50 U 0.20 U 0.20 U 0.20 U 0.30 U 0.20 U 0.30 U 0.20 U 0.30 U 0.20 U 0.30 U 0.20 U 0.30 U 0.00 U	0.30 U 0.30 U 0.30 U NA 0.40 0.80 U 0.30 U NA 0.50 U 0.20 U NA 0.50 U 0.20 U	MW-13S 10/11/04 0.30 U 0.60 0.40 U 0.60 0.90 U 0.40 U 0.40 U 0.40 U 0.40 U 0.20 U MW-14 11/20/14	MW-13S 03/22/05 0.30 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.20 U MW-14 06/04/15	0.30 U 0.30 U 0.30 U 0.20 U 1.8 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U	0.30 U 0.30 U 0.30 U NA 0.50 U 0.40 U 0.50 U 15
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chloroethane Chloroethane Chloroethane Chloroethane Trichloroethene Trichloroethene Trichloroethene Osi-1,2-Dichloroethene Carbon Disulfide Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane	Si CAO Goal Si	Location ID: ample Date: Units ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	MW-13D 06/04/15 1.0 7.5 1.0 U 0.35 J 1.0 U 1.0 0.58 J 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 0.58 J 0.0 U 0.30 J 0.30 U 0.30 U 0.30 U 0.30 U	MW-13D 11/16/15 0.98 J 86 1.0 U 0.33 J 1.0 U 0.95 J 7.2 1.0 U 0.14 J 1.0 U MW-14 10/22/97	MW-13D 10/04/16 5.0 U 4.9 NA 1.0 U 5.0 U 1.0 U 1	MW-13D 10/03/17 1.0 U 26 1.0 U NA 3.2 1.0 U NA MW-14 07/22/98 2.0 U 2.300 D NA	MW-13D 11/20/18 1.0 U 1.0 U 1.	MW-13D 09/20/19 1.8 46 1.0 U 1.0 U 1.0 U NA 7-9 1.0 U NA MW-14 04/13/99 7.0 U 2.300 NA	MW-13D 1008/20 1.0 U 3.2 1.0 U 1.0 U 1	MW-13D 9/14/2021 1.9 16 1.0 U 1.0 U 1.0 U 1.0 U NA 2.8 1.0 U 1.0 U NA 4 12/19/01 2.0 U 1,400 NA	MW-13D 09/14/22 1.0 U 22 1.0 U 1.0 U 0.79 J 1.0 U 1.0 U 0.79 J 1.0 U 1.0 U 0.97 J 1.0 U 1.0 U 0.97 S 1.0 U 1.0 U	MW-13DDL 07/21/98 100 U 5.100 D NA 100 U 25.0 U 100 U	MW-13D-DL 02/25/98 500 U 2,600 D NA 500 U 500 U 500 U 500 U 500 U MW-14 12/19/02	MW-13S 10/24/97 10 U 8.0 J NA 10 U 10 U 10 U 10 U 10 U 10 U 10 U 10 U	MW-13S 02/25/98 10 U 10 U 10 U NA 10 U 10 U 10 U 10 U NA 10 U 10 U 10 U MW-14 10/90/03	MW-13S 07/21/98 2.0 U 2.0 U NA 2.0 U 5.0 U 2.0 U NA 2.0 U 2.0 U NA 2.0 U 2.0 U NA 2.0 U 3.0 U 3.	MW-13S 12/15/98 2.0 U 2.0 U NA 2.0 U 7.0 2.0 U NA 2.0 U 2.0 U NA 10/11/04 0.30 U 170 6.4	MW-13S 04/13/99 0.35 U 0.21 U NA 0.59 U 1.1 U 0.62 U 0.44 U NA 0.71 U 0.56 U MW-14 03/23/05	MW-13S 11/13/01 0.20 U 0.20 U 0.20 U 0.20 U 1.0 U 0.20 U 0.20 U 0.20 U NA 0.20 U NA 0.20 U MW-14 09/23/05	MW-13S 12/19/01 0.20 U 0.20 U 0.20 U 0.30 U 1.0 U 0.30 U NA 0.20 U 0.30 U NA 0.20 U 0.30 U	0.30 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.20 U 0.10 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U	MW-13S 03/03/03 0.30 U 0.40 U 0.50 U 0.50 U 0.20 U 0.90 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U	MW-13S 10/09/03 0.30 U 0.30 U 0.50 U 0.50 U 0.20 U 0.80 U 0.20 U 0.50 U 0.20 U 0.50 U 0.20 U 0.50 U 0.20 U 0.50 U 0.20 U 0.50 U	0.30 U 0.30 U 0.30 U 0.30 U NA 0.40 0.80 U 0.20 U NA 0.50 U 0.20 U NA 0.50 U 0.20 U NA 0.50 U 0.20 U NA 0.50 U 0.20 U NA 0.50 U 0.50 U 0.50 U 0.50 U 0.50 U 0.50 U 0.50 U	0.30 U 0.80 0.80 0.40 U 0.80 0.90 U 0.40 U 0	MW-13S 03/22/05 0.30 U 0.40 U 0.40 U 0.30 U 0.90 U 0.40 U 0.20 U MW-14 06/04/15	MW-13S 09/22/05 0.30 U 0.30 U 0.30 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.40 U 0.30 U 0.40 U 0.30 U 0.40 U 0.30 U 1.8 0.50 U 0.40 U 0.40 U 0.30 U 0.50 U	0.30 U 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U 0.40 U NA 0.30 U 0.40 U 0.40 U NA 0.30 U
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chlorotorm Methylene Chloride Tetrachloroethene Trichloroethene ics-1,2-Dichloroethene ics-1,2-Dichloroethene Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane Chloroethane Chloroethane Chloroethane	S. CAO Goal 5 5 5 5 5 CAO Goal 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Location ID: ample Date: Units ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	MW-13D 06/04/15 1.0 7.5 1.0 U 0.35 J 1.0 U 7.0 0.58 J 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 0.58 J 0.58 J 0.	MW-13D 11/16/15 0.98 J 86 1.0 U 0.38 J 7.2 1.0 U 0.14 J 1.0 U 0.14 J 1.0 U 0.4 V 0.5	MW-13D 10/04/16 5.0 U 4.9 NA 1.0 U 5.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 2.100,000 U 2.100,000 U 2.100,000 U NA	MW-13D 10/03/17 1.0 U 26 1.0 U 1.0 U 1.0 U NA 3.2 1.0 U 1.0 U NA 2.0 U 2.300 D NA 2.0 U 2.300 D NA 2.0 U	MW-13D 11/20/18 1.0 U 1.0 U 1.0 U 0.73 J 1.0 U 1.0 U 1	MW-13D 09/20/19 1.8 46 1.0 U 1.0 U NA 7.9 1.0 U 1.0 U NA 04/13/99 7.0 U 2.300 NA 12 U	MW-13D 10/08/20 1.0 U 3.2 1.0 U NA MW-14 11/20/01 2.0 U 1.200 NA 1.9 U	MW-13D 9/14/2021 1.9 16 1.0 U 1.0 U 1.0 U NA 2.8 1.0 U 1.0 U NA VA 1.0 U 1.0 U	MW-13D 09/14/22 1.0 U 22 1.0 U 1.0 U	MW-13DDL 07/21/98 100 U 5,100 D NA 100 U 259 U 100 U 100 U NA 100 U 100 U MW-14 09/18/02 NA 12 U 14 U 14 U 16 U 17 U 18 U 18 U 18 U 18 U 18 U 18 U 18 U 18	MW-13D-DL 02/25/98 500 U 2,600 D NA 500 U 500 U 500 U 500 U 500 U MW-14 12/19/02 1.4 U 1.2 U	MW-13S 10/24/97 10 U 8.0 J NA 10 U 10 U 10 U 10 U 10 U 10 U MW-14 03/05/03 1.4 U 420 2.4 U	MW-13S 02/25/98 10 U 10 U NA 10 U 10 U 10 U 10 U 10 U 10 U 10 U 10 U	MW-13S 07/21/98 2.0 U 2.0 U 2.0 U NA 2.0 U 5.0 U 2.0 U NA 2.0 U 2.0 U NA 2.0 U 3.0 U 03/18/04 0.30 U 190 NA 0.20 U 0.30 U 0.30 U	MW-13S 12/15/98 2.0 U 2.0 U 2.0 U NA 2.0 U 2.0 U 2.0 U NA 2.0 U 3.0 U 3.	MW-13S 04/13/99 0.35 U 0.21 U NA 0.59 U 1.1 U 0.62 U 0.44 U NA 0.71 U 0.56 U MW-14 03/23/05 0.30 U 140 0.40 U 0.30 U	MW-13S 11/13/01 0.20 U 0.20 U NA 0.20 U 1.0 U 0.20 U 0.00 U 0.00 U 0.00 U 0.00 U 0.00 U 0.00 U 0.00 U 0.00 U 0.00	MW-13S 12/19/01 0.20 U 0.20 U 0.20 U NA 0.20 U 1.0 U 0.30 U NA 0.20 U 0.30 U MW-14 03/29/06 0.30 U 93 9.2 0.50 U	MW-13S 10/07/02 0.30 U 0.40 U NA 5.5 0.90 U 0.10 U NA 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 120 4.2 0.50 U	MW-13S 03/03/03 0.30 U 0.40 U 0.50 U 0.50 U 0.20 U 0.10 U 0.30 U	MW-13S 10/09/03 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.20 U	MW-13S 03/18/04 0.30 U 0.30 U NA 0.40 0.80 U 0.20 U NA 0.50 U 0.20 U NA 0.50 U 0.20 U MW-14 05/02/11 2.0 U 43 2.9	MW-13S 10/11/04 0.30 U 0.60 0.40 U 0.60 0.90 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 11/20/14 11/20/14 1.0 U 24 1.3	MW-13S 03/22/05 0.30 U 0.40 U 0.20 U MW-14 06/04/15 1.0 U 21 0.78 J	MW-13S 09/2205 0.30 U 0.30 U 0.20 U 1.8 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U 0.40 U 0.40 U 1/16/15 1.9 U 1/16/15	MW-13S 03/16/06 0.30 U 0.30 U NA 0.50 U 0.50 U 0.40 U NA 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chloroethane Chloroethane Chloroethane Chloroethene Trichloroethene Trichloroethene Ost-1,2-Dichloroethene Veryl Chloride Carbon Disulfide Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chloroethane Chloroform Methylene Chloride	Si CAO Goal Si	Location ID: ample Date: Units ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	MW-13D 06/04/15 1.0 7.5 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	MW-13D 11/16/15 0.98 J 96 1.0 U 0.33 J 1.0 U 0.35 J 7.2 U 0.14 J 1.0 U MW-14 10/22/97 250 U 4.0000 NA 250 U 250 U	MW-13D 1004/16 5.0 U 4.9 NA 1.0 U 1.8 NA 1.0 U 1.8 NA 1.0 U 1.8 NA 1.0 U 1.0 U 2/24/98 100.000 U 2/26/90/90 E NA 100.000 U	MW-13D 10/03/17 10 U 28 10 U 10 U 10 U 10 U 10 U NA 3.2 10 U 10 U NA 4 07/22/98 2.0 U 2.300 D NA 2.0 U	MW-13D 11/20/18 1.0 U 1.	MW-13D 09/20/19 1.8 46 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U NA 7.9 1.0 U NA MW-14 04/13/99 7.0 U 2.3000 NA 12 U 2.3001	MW-13D 1008/20 10 U 32 10 U 32 10 U	MW-13D 9/14/2021 1.9 16 1.0 U 1.0 U 1.	MW-13D 09/14/22 1.0 U 1.0 U 2.8 U 670 NA 2.8 U 680 88 U 88 U 88 S U 8	MW-13DDL 0772198 100 U 5.100 D NA 100 U 250 U 100 U 100 U 100 U 100 U 100 U MW-14 09/18/02 1.4 U 420 NA 1.2 U 4.4 U	MW-13D-DL 02/25/98 500 U 2,600 D NA 500 U 500 U 500 U 500 U 500 U NA 500 U 12/19/02 1.4 U 420 2.4 U 1.2 U 1.4 U	MW-13S 10/24/97 10 U 8 D J NA 10 U 10 U 10 U 10 U 10 U 10 U 10 U 10 U	MW-13S 02/25/98 10 U	MW-13S 07721/98 2.0 U 2.0 U 5.0 U 5.0 U 5.0 U 2.0 U 2.0 U 2.0 U MW-14 03/18/04 0.30 U 190 NA 0.20 U	MW-13S 12/15/88 2.0 U 2.0 U 2.0 U NA 2.0 U 2.0 U 2.0 U 2.0 U 4.0 U	MW-13S 04/13/99 0.35 U 0.21 U NA 0.59 U 1.11 U 0.82 U 0.44 U NA 0.71 U 0.56 U MW-14 03/23/05 0.30 U 140 0.40 U 0.30 U	MW-13S 11/13/01 0.20 U 0.20 U 0.20 U 1.0U 1.0U 0.20 U 0.20 U 0.00 U 0.00 U 0.00 U 0.00 U 0.00	MW-13S 12/19/01 0.20 U 0.20 U 0.20 U NA 0.20 U 1.0 U 0.30 U 0.30 U NA 0.20 U 0.30 U NA 0.20 U 0.30 U NA 0.20 U 0.30 U	MW-13S 10/07/02 0.30 U 0.40 U NA 5.6 0.30 U 0.20 U 0.10 U NA 0.30 U MW-14 06/08/06 0.30 U 120 4.2 0.50 U	MW-13S 03/03/03 0.30 U 0.40 U 0.50 U 0.20 U 0.20 U 0.20 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.50 U 0.50 U	MW-13S 10/09/03 0.30 U 0.30 U 0.50 U 0.20 U 0.00 U	MW-13S 03/18/04 0.30 U 0.30 U 0.30 U NA 0.40 0.80 U 0.30 U NA 0.50 U 0.20 U NA 0.50 U 0.20 U 0.20 U 43 2.9 0.81 JB	MW-13S 10/11/04 0.30 U 0.60 0.40 U 0.60 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.20 U MW-14 11/20/14	MW-13S 03/22/05 0.30 U 0.40 U 0.50 U	MW-13S 09/22/05 0.30 U 0.30 U 1.8 0.50 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 11/16/15 MW-14 11/16/15 1.0 U 18 0.56 U 1.0 U	MW-13S 03/16/06 0.30 U 0.30 U NA 0.50 U 0.50 U 0.40 U NA 0.30 U 0.30 U MW-14 10/05/16 5.0 U 15 NA
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chlorotorm Methylene Chloride Tetrachloroethene Trichloroethene ics-1,2-Dichloroethene ics-1,2-Dichloroethene Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane Chloroethane Chloroethane Chloroethane Chloroethane Chloroethane Chloroethane Chloroethane Chloroethane Chloroethane Tetrachloroethene	Si CAO Goal Si	Location ID: ample Date: Units ug'L ug'L ug'L ug'L ug'L ug'L ug'L ug'L	MW-13D 06/04/15 1.0 7.5 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	MW-13D 11/16/15 0.98 J 86 1.0 U 0.98 J 1.0 U 0.95 J 1.0 U 0.95 J 7.2 1.0 U 0.14 J 1.0 U 1.	MW-13D 10/04/16 5.0 U 4.9 NA 1.0 U 5.0 U 1.0 U 1	MW-13D 10/03/17 10/03/17 10/0 26 10/0 10/0 10/0 NA 32 10/0 NA WW-14 07/22/8 2,0/0 NA 2,0/0 NA 2,0/0 0 5,0/0 2,0/0	MW-13D 11/20/18 1.0 U 1.0 U 1.	MW-13D 09/20/19 1.8 46 1.0 U 1.0 U 1.0 U NA 7.9 1.0 U NA MW-14 04/13/99 7.0 U 2.300 NA 12 U 2.301 12 U	MW-13D 1008/20 1008/20 10.0 U 3.2 1.0 U 1.	MW-13D 9/14/2021 1.9 16 1.0 U 1.0 U 1.0 U NA 2.8 1.0 U NA MW-14 12/19/01 2.0 U 1.400 NA 1.0 U NA 1.0 U 1.0 U NA 1.0 U 1.0 U N 1.0 U N 1.0 U N 1.0 U N 1.0 U N 1.0 U N 1.0 U N 1.0 U N 1	MW-13D 09/14/22 1.0 U 22 1.0 U 1.0 U 1.0 U 1.0 U 0.79 J 3.0 1.0 U 1.0 U	MW-13DDL 07121/88 100 U 5,100 D NA 100 U 5,00 D NA 100 U 10	MW-13D-DL 022598 500 U 2,600 D NA 500 U 500 U 500 U 500 U 500 U 500 U 14 U 121902 11 4 U 4 4 U 4 4 U 1 2 U 4 4 U 4 4 U 1 2 U	MW-13S 10/24/97 10 U 8.0 J NA 10 U 10 U 10 U 10 U 10 U 10 U 10 U 10 U	MW-13S 02/25/98 10 U 10 U NA 10 U 10 U 10 U 10 U 10 U 10 U 10 U 10 U	MW-13S 07/21/98 2.0 U 2.0 U 2.0 U NA 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 3.0 U	MW-13S 12/15/98 2.0 U 2.0 U 2.0 U NA 2.0 U 2.0 U 2.0 U NA 2.0 U 2.0 U NA 4.0 U 2.0 U 0.30 U 170 6.4 0.30 U 0.90 U 0.90 U	MW-13S 04/13/99 0.35 U 0.21 U NA 0.59 U 1.1 U 0.62 U 0.44 U NA 0.71 U 0.56 U MW-14 03/23/05 0.30 U 140 0.30 U 0.99 U 0.99 U 0.40 U	MW-13S 11/13/01 0.20 U 0.20 U 0.30 U 0.00 U	MW-13S 12/19/01 0.20 U 0.20 U 0.20 U NA 0.20 U 0.30 U 0.30 U 0.30 U 0.20 U 0.20 U 0.30	MW-13S 10/07/02 0.30 U 0.40 U NA 5.6 0.90 U 0.20 U 0.10 U NA 0.30 U 0.30 U	MW-13S 03/03/03 0.30 U 0.40 U 0.40 U 0.50 U 0.20 U 0.20 U 0.20 U 0.30 U 0.50 U	MW-13S 10/09/03 0.30 U 0.30 U 0.50 U 0.50 U 0.20 U 0.00 U	MW-13S 03/18/04 0.30 U 0.30 U 0.30 U NA 0.40 0.80 U 0.30 U 0.20 U NA 0.50 U 0.20 U 0.50 U 0.20 U 0.50 U 0.5	MW-13S 1011/04 0.30 U 0.60 0.40 U 0.60 0.90 U 0.40 U 0.40 U 0.40 U 0.40 U 0.20 U MW-14 11/20/14 1.0 U 1.0 U 1.0 U	MW-13S 03/22/05 0.30 U 0.40 U 0.40 U 0.40 U 0.30 U 0.90 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.20 U MW-14 06/04/15 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	MW-13S 09/22/05 0.30 U 0.30 U 0.30 U 1.8 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U MW-14 11/16/15 1.0 U	MW-13S 03/16/06 0.30 U 0.30 U NA 0.50 U 0.40 U 0.40 U 0.30 U NA 0.30 U MW-14 10/05/16 5.0 U 15 NA 1.0 U 15 NA 1.0 U 15 NA 1.0 S 1.0
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chioroethane Chioroethane Chioroethane Chioroethane Trichloroethene Trichloroethene Cist-1,2-Dichloroethene Vivyt Chioroethene 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chioroethane Chioroethane Chioroethane Chioroethane Chioroethane Chioroethane Chioroethane Chioroethane Trichloroethene Trichloroethene	Si CAO Goal Si	Location ID: ample Date: Units ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	MW-13D 06/04/15 1.0 7.5 1.0 1.0 0.38 J 1.0 U 0.38 J 1.0 U 0.38 J 1.0 U 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U	MW-13D 11/16/15 0.98 J 86 1.0 U 0.33 J 1.0 U 0.95 J 7.2 1.0 U 0.95 J 0.14 J 0.14 J 0.14 J 0.14 J 0.15 J 0	MW-13D 10/04/16 5.0 U 4.9 NA 1.0 U 5.0 U 1.0 U 1	MW-13D 10/03/17 10 U 28 10 U 10 U 10 U 10 U 10 U 10 U NA 3.2 10 U 10 U NA WW-14 07/22/98 2.0 U 2.300 D NA 2.0 U 2.0 U 2.0 U 2.0 U	MW-13D 11/20/18 1.0 U 1.0 U 1.	MW-13D 09/20/19 1.8 46 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U NA 7.9 1.0 U 1.0 U NA 04/13/99 7.0 U 2.3000 NA 12 U 2.3001 12 U 2.3001 12 U 12 U 12 U 12 U 12 U 12 U 12 U 13 U 14 U 15 U 16 U 16 U 16 U 16 U 16 U 16 U 16 U 16	MW-13D 1008/20 1.0 U 3.2 1.0 U	MW-13D 9/14/2021 1.9 16 10.0 1.0.0 1.0.0 1.0.0 NA 2.8 1.0.0 NW-14 12/1901 2.0.0 1.0.0 1.0.0 NB 1.0.0 N	MW-13D 09/14/22 1.0 U 2.2 1.0 U 1.0 U 1.0 U 0.79 J 3.0 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 2.8 U 670 NA 2.5 U 8.8 U 8.8 U 2.4 U 1.2 U 8.8 U 8.8 U 9.8 U	MW-13DDL 07/21/98 100 U 5,100 D NA 100 U 259 U 100 U NA 100 U 100 U NA 100 U 100 U 1	MW-13D-DL 0225/98 500 U 2,600 D 2,600 D 500 U 500 U 500 U 500 U 500 U 500 U 100 U 10	MW-13S 10/24/97 10 U 8.0 J NA 10 U 10 U 10 U 10 U 10 U 10 U 10 U 10 U	MW-13S 02/25/98 10 U 10 U 10 U NA 10 U 10 U 10 U NW-14 10 U 10 U NW-14 10 U 0.30 U 200 7.0 0.80 U 0.30 U	MW-13S 07721/98 2.0 U 2.0 U 5.0 U 5.0 U 2.0 U 2.0 U 2.0 U 2.0 U 3.0 S 3.0 S 3.	MW-13S 12/15/88 2.0 U 2.0 U 2.0 U NA 2.0 U 2.0 U NA 2.0 U 2.0 U 0.0 U	MW-13S 04/13/99 0.35 U 0.21 U NA 0.59 U 1.1 U 0.62 U 0.71 U 0.52 U 0.71 U 0.53 U 0.73 U 0.73 U 0.73 U 0.73 U 0.73 U 0.73 U 0.73 U 0.74 U 0.73 U 0.74 U 0.75	MW-13S 11/13/01 0.20 U 0.20 U 0.20 U NA 0.20 U 1.0 U 0.20 U NA 0.20 U 0.20 U NA 0.20 U 0.20 U NA 0.20 U	MW-13S 12/19/01 0.20 U 0.20 U NA 0.20 U 1.0 U 0.30 U 0.30 U 0.30 U 0.20 U 0.30 U	MW-13S 10/07/02 0.30 U 0.40 U NA 5.6 0.99 U 0.20 U 0.30 U 120 4.2 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U	MW-13S 03/03/03 0.30 U 0.40 U 0.50 U 0.50 U 0.20 U 0.20 U 0.30 U	MW-13S 10/09/03 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.20 U 0.30 U 0.20 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U	MW-13S 03/18/04 0.30 U 0.30 U 0.30 U NA 0.40 0.80 U 0.30 U NA 0.50 U 0.20 U NA 0.50 U 0.20 U 0.50 U	MW-13S 10/11/04 0.30 U 0.60 U 0.60 U 0.60 U 0.90 U 0.40 U 0.40 U 0.40 U 0.40 U 0.20 U MW-14 11/20/14 11/20/14 1.0 U 1.0 U 1.0 U	MW-13S 03/22/05 0.30 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U 0.40 U 0.50 U	MW-13S 09/22/05 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U 0.40 U 1/8 I 1/8 I 1 I 1 I 1 B 0.56 U 1 D 1 D 1 D 1 D 1 D 1 D 1 D 1 D	MW-13S 03/16/06 0.30 U 0.30 U NA 0.50 U 0.50 U 0.40 U 0.40 U 0.30 U NA 1005/16 5.0 U 15.0 U 15.0 U 10.0 U 10.0 U 10.0 U 10.0 U
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chlorotorm Methylene Chloride Tetrachloroethene Trichloroethene icis-1,2-Dichloroethene Volatile Organics 1,1,2-Trichloroethane 1,1,2-Trichloroethane Chloroethane Chloroethane Chloroethane Chloroethane Trichloroethene Trichloroethene Trichloroethene Trichloroethene Trichloroethene Trichloroethene Trichloroethene	Si CAO Goal Si	Location ID: ample Date: Units ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	MW-13D 06/04/15 1.0 7.5 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	MW-13D 11/16/15 0.98 J 86 1.0 U 0.98 J 1.0 U 0.95 J 7.2 1.0 U 0.95 J 1	MW-13D 10/04/16 5.0 U 4.9 NA 1.0 U 5.0 U 1.0 U 1	MW-13D 10/03/17 10/03/17 10/03/17 26 10/01 10/01 10/01 NA 32 10/01 NA MW-14 07/298 2,0/0 2,3/00 NA 2,0/0 2,0/0 2,0/0 2,0/0 NA	MW-13D 11/20/18 1.0 U 1.0 U 1.	MW-13D 09/20/19 1.8 46 1.0 U 1.0 U 1.0 U NA 7-9 1.0 U NA MW-14 04/13/89 7.0 U 2.300 NA 12 U 2.300 NA 12 U 3.800 NA 12 U 3.800 NA 12 U 3.800 NA 12 U 3.800 NA 12 U 3.800 NA 12 U 3.800 NA 12 U 3.800 NA 12 NA 13 NA 14 NA 15 NA 16 NA	MW-13D 1008/20 1008/20 10 U 3.2 1.0 U 1.2	MW-13D 9/14/2021 1.9 16 10 1.0 U 1.0 U 1.0 U NA 2.8 1.0 U NA WW-14 12/19/01 1.400 NA 2.0 U 1.0 U NA 1.0 U NA 2.1 U NA 1.0 U 1.0 U NA 1.0 U NA 1.0 U 1.0	MW-13D 09/14/22 1.0 U 22 1.0 U 1.0 U 1.0 U 1.0 U 0.79 J 3.0 1.0 U 1.0 U	MW-13DDL 07721/88 100 U 5,100 D NA 100 U 5,00 D NA 100 U 10	MW-13D-DL 022598 500 U 2.600 D NA 500 U 500 U 500 U 500 U 500 U 500 U 14.0 12.1902 11.4 U 420 420 420 444 U 1.2 U 1.2 U 1.6 U	MW-13S 10/24/97 10 U 8.0 J NA 10 U 10 U 10 U 10 U 10 U 10 U 10 U 10 U	MW-13S 02/25/98 10 U 10 U NA 10 U 10 U 10 U 10 U 10 U 10 U 10 U 10 U	MW-13S 07/21/98 2.0 U 2.0 U 2.0 U NA 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 3.0 U	MW-13S 12/15/98 2.0 U 2.0 U 2.0 U NA 2.0 U 2.0 U NA 2.0 U 2.0 U NA 2.0 U 10/11/04 10/11/04 0.30 U 0.90 U 0.90 U 0.40 U 0.40 U 0.40 U	MW-13S 04/13/99 0.35 U 0.21 U NA 0.59 U 1.1 U 0.62 U 0.44 U NA 0.71 U 0.56 U MW-14 03/23/05 0.30 U 140 0.30 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U	MW-13S 11/13/01 0.20 U 0.20 U 0.20 U NA 0.20 U 0.20 U 0.20 U 0.20 U 0.20 U 0.20 U 0.20 U 0.20 U 0.30 U	MW-13S 12/19/01 0.20 U 0.20 U 0.20 U NA 0.20 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.20 U 0.20 U 0.20 U 0.20 U 0.20 U 0.30	MW-13S 1007702 0.30 U 0.40 U NA 5.6 0.90 U 0.20 U 0.30 U 0.30 U 0.30 U 0.30 U 120 4.2 0.50 U 0.50 U 0.50 U 0.50 U 0.50 U 0.50 U	MW-13S 03/03/03 0.30 U 0.40 U 0.40 U 0.50 U 0.20 U 0.20 U 0.20 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.50 U 0.40 U 0.40 U 0.40 U	MW-13S 10/09/03 0.30 U 0.30 U 0.50 U 0.50 U 0.20 U 0.00 U	MW-13S 03/18/04 0.30 U 0.30 U 0.30 U NA 0.40 0.80 U 0.30 U 0.20 U NA 0.50 U 0.20 U 0.50 U 0.5	MW-13S 1011/04 0.30 U 0.60 0.40 U 0.60 0.90 U 0.40 U 0.40 U 0.40 U 0.20 U MW-14 11/20/14 1.0 U 24 1.3 1.0 U 1.0 U 1.0 U	MW-13S 03/22/05 0.30 U 0.40 U 0.40 U 0.40 U 0.30 U 0.90 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.70 U	MW-13S 09/2205 0.30 U 0.30 U 0.30 U 0.20 U 1.8 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U MW-14 11/16/15 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	MW-13S 03/16/06 0.30 U 0.30 U NA 0.50 U 0.50 U 0.40 U 0.40 U 0.30 U NA 1005/16 5.0 U 15 NA 1.0 U 15 NA 1.0 U 15 NA 1.0 U 15 NA 1.0 U 15 NA 1.0 U 15 NA 1.0 U 15 NA 10 NA NA 10 NA 10 NA 10 NA 10 NA 10 NA 10 NA 10
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chioroethane Chioroethane Chioroethane Chioroethane Trichloroethene Trichloroethene Cist-1,2-Dichloroethene Vivyt Chioroethene 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chioroethane Chioroethane Chioroethane Chioroethane Chioroethane Chioroethane Chioroethane Chioroethane Trichloroethene Trichloroethene	Si CAO Goal Si	Location ID: ample Date: Units ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	MW-13D 06/04/15 1.0 7.5 1.0 1.0 0.38 J 1.0 U 0.38 J 1.0 U 0.38 J 1.0 U 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U	MW-13D 11/16/15 0.98 J 86 1.0 U 0.33 J 1.0 U 0.95 J 7.2 1.0 U 0.95 J 0.14 J 0.14 J 0.14 J 0.14 J 0.15 J 0	MW-13D 10/04/16 5.0 U 4.9 NA 1.0 U 5.0 U 1.0 U 1	MW-13D 10/03/17 10 U 28 10 U 10 U 10 U 10 U 10 U 10 U NA 3.2 10 U 10 U NA WW-14 07/22/98 2.0 U 2.300 D NA 2.0 U 2.0 U 2.0 U 2.0 U	MW-13D 11/20/18 1.0 U 1.0 U 1.	MW-13D 09/20/19 1.8 46 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U NA 7.9 1.0 U 1.0 U NA 04/13/99 7.0 U 2.3000 NA 12 U 2.3001 12 U 2.3001 12 U 12 U 12 U 12 U 12 U 12 U 12 U 13 U 14 U 15 U 16 U 16 U 16 U 16 U 16 U 16 U 16 U 16	MW-13D 1008/20 1.0 U 3.2 1.0 U	MW-13D 9/14/2021 1.9 16 10.0 1.0.0 1.0.0 1.0.0 NA 2.8 1.0.0 NW-14 12/1901 2.0.0 1.0.0 1.0.0 NB 1.0.0 N	MW-13D 09/14/22 1.0 U 1.0 U 2.8 U 670 NA 2.5 U 8.8 U 2.4 U 2.8 U 6.7 U 8.8 U 8.8 U 8.8 U 9.7 U 8.8 U 8.8 U 9.8	MW-13DDL 07/21/98 100 U 5,100 D NA 100 U 259 U 100 U NA 100 U 100 U NA 100 U 100 U 1	MW-13D-DL 0225/98 500 U 2,600 D 2,600 D 500 U 500 U 500 U 500 U 500 U 500 U 100 U 10	MW-13S 10/24/97 10 U 8.0 J NA 10 U 10 U 10 U 10 U 10 U 10 U 10 U 10 U	MW-13S 02/25/98 10 U 10 U 10 U NA 10 U 10 U 10 U NW-14 10 U 10 U NW-14 10 U 0.30 U 200 7.0 0.80 U 0.30 U	MW-13S 07721/98 2.0 U 2.0 U 5.0 U 5.0 U 2.0 U 2.0 U 2.0 U 2.0 U 3.0 S 3.0 U 190 NA 0.30 U 190 NA 0.30 U 190 0.80 U 0.30 U 0.30 U 0.30 U	MW-13S 12/15/88 2.0 U 2.0 U 2.0 U NA 2.0 U 2.0 U NA 2.0 U 2.0 U 0.0 U	MW-13S 04/13/99 0.35 U 0.21 U NA 0.59 U 1.1 U 0.62 U 0.71 U 0.52 U 0.71 U 0.53 U 0.73 U 0.73 U 0.73 U 0.73 U 0.73 U 0.73 U 0.73 U 0.74 U 0.73 U 0.74 U 0.75	MW-13S 11/13/01 0.20 U 0.20 U 0.20 U NA 0.20 U 1.0 U 0.20 U NA 0.20 U 0.20 U NA 0.20 U 0.20 U NA 0.20 U	MW-13S 12/19/01 0.20 U 0.20 U NA 0.20 U 1.0 U 0.30 U 0.30 U 0.30 U 0.20 U 0.30 U	MW-13S 10/07/02 0.30 U 0.40 U NA 5.6 0.99 U 0.20 U 0.30 U 120 4.2 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U	MW-13S 03/03/03 0.30 U 0.40 U 0.50 U 0.50 U 0.20 U 0.20 U 0.30 U	MW-13S 10/09/03 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.20 U 0.30 U 0.20 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U	MW-13S 03/18/04 0.30 U 0.30 U 0.30 U NA 0.40 0.80 U 0.30 U NA 0.50 U 0.20 U NA 0.50 U 0.20 U 0.50 U	MW-13S 10/11/04 0.30 U 0.60 U 0.60 U 0.60 U 0.90 U 0.40 U 0.40 U 0.40 U 0.40 U 0.20 U MW-14 11/20/14 11/20/14 1.0 U 1.0 U 1.0 U	MW-13S 03/22/05 0.30 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U 0.40 U 0.50 U	MW-13S 09/22/05 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U 0.40 U 1/8 I 1/8 I 1 I 1 I 1 B 0.56 U 1 D 1 D 1 D 1 D 1 D 1 D 1 D 1 D	MW-13S 03/16/06 0.30 U 0.30 U NA 0.50 U 0.50 U 0.40 U 0.40 U 0.30 U NA 1005/16 5.0 U 15.0 U 15.0 U 10.0 U 10.0 U 10.0 U 10.0 U



	Location ID:	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14	MW-14-DL	MW-14I	MW-14I	MW-14I	MW-14I	MW-14I	MW-14I	MW-14I	MW-14I	MW-14I	MW-14I	MW-14I	MW-14I	MW-14I	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15
	Sample Date:	10/03/17	11/20/18	09/20/19	10/08/20	09/14/21	09/14/22	02/24/98	01/03/08	01/03/08	05/02/11	11/20/14	06/04/15	11/16/15	10/05/16	10/04/17	11/20/18	09/20/19	10/08/20	9/14/2021	09/15/22	10/21/97	02/24/98	07/23/98	12/15/98	04/13/99	03/18/04	10/12/04	03/22/05	09/22/05
Volatile Organics	CAO Goal ¹ Units																													
1,1,2-Trichloroethane	5 ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	500,000 U	0.20 U	0.40 U	2.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10,000 U	2.0 U	2.0 U	0.35 U	0.30 U	0.30 U	0.30 U	0.30 U
1,2-Dichloroethane	5 ug/L	13	8.1	12	1.0 U	1.0 U	3.0	2,000,000 D	170	220	42	23	19	18	11	8.7	4.7	4.6	3.7	4.4	5.3	10 U	10,000 U	2.0 U	2.0 U	0.21 U	0.30 U	0.40 U	0.40 U	0.30 U
Chloroethane	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	8.2	11	3.0	3.2	1.9	2.4	NA	1.3	1.0 U	0.93 J	1.0 U	1.0 U	1.0 U	NA	NA	NA	NA	NA	NA	0.40 U	0.40 U	0.20 U
Chloroform	0.19 ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	500,000 U		0.40 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10,000 U	2.0 U	2.0 U	0.59 U	0.20 U	0.30 U	0.30 U	0.50 U
Methylene Chloride	5 ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	500,000 U		0.80 U	0.50 JB	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10,000 U	5.0 U	5.0 U	1.1 U	0.80 U	0.90 U	0.90 U	0.50 U
Tetrachloroethene	5 ug/L	NA .	1.0 U	NA .	1.0 U	1.0 U	1.0 U	500,000 U		0.80 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA NA	1.0 U	NA .	1.0 U	NA .	1.0 U	10 U	10 U	2.0 U	2.0 U	0.62 U	0.30 U	0.40 U	0.40 U	0.40 U
Trichloroethene cis-1.2-Dichloroethene	J 1972	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	500,000 U NA	0.40 U 0.30 U	0.70 U 0.60 U	2.0 U 2.0 U	1.0 U	1.0 U 1.0 U	1.0 U	1.0 U NA	1.0 U	1.0 U	1.0 U	1.0 U 1.0 U	1.0 U 1.0 U	1.0 U 1.0 U	10 U NA	10,000 U NA	2.0 U NA	2.0 U NA	0.44 U NA	0.20 U NA	0.40 U 0.40 U	0.40 U 0.40 U	0.40 U 0.40 U
Vinyl Chloride	ug/L 2 ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	500.000 U	0.30 U	0.50 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U 1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U	10.000 U	2.0 U	2.0 U	0.71 U	0.50 U	0.40 U	0.40 U	0.40 U
Carbon Disulfide	1000 ug/L	NA	1.0 U	NA NA	NA.	NA	1.0 U	500,000 U		0.90 U	0.44 J	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	NA NA	NA	NA	1.0 U	10 U	10,000 U	2.0 U	2.0 U	0.56 U	0.20 U	0.40 U	0.40 U	0.30 U
Odrbon Dibanido	1000 -9-	147	1.00	100	10.1	100	1.00	000,000	0.40 0	0.00 0	0.110	1.00	1.00	1.00	1.00		1.00		101		1.00	100	10,000 0	2.00	2.00	0.000	0.20 0	0.200	0.200	0.00 0
	Location ID:	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15I	MW-15I	MW-15I	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16	MW-16
	Sample Date:	03/16/06	06/22/06	01/03/08	05/02/11	11/21/14	06/04/15	11/16/15	10/05/16	10/03/17	11/20/18	09/20/19	01/03/08	01/03/08	05/02/11	10/21/97	02/24/98	07/23/98	12/15/98	04/13/99	06/08/06	12/15/06	05/02/11	11/21/14	06/04/15	11/16/15	10/05/16	10/03/17	11/20/18	09/20/19
Volatile Organics	CAO Goal ¹ Units																													
1,1,2-Trichloroethane	5 ug/L	0.30 U	0.30 U	0.20 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	0.20 U	0.20 U	1.0 U	10 U	250,000 U	2.0 U	200 U	35 U	3.3 U	0.20 U	20 U	2.3	1.0 U	1.0 U	0.97 J	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	5 ug/L	0.30 U	0.30 U	0.30 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.30 U	0.40	1.0 U	5,000 D	7,300 D	9,700 D	8,700	11,000	960	10	410	160	1.8	1.0	32	4.3	1.3	13
Chloroethane	ug/L	NA	0.20 U	0.40 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	0.40 U	0.40 U	1.0 U	NA	NA	NA	NA	NA	2.4 U	0.40 U	20 U	0.89 J	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U
Chloroform	0.19 ug/L	0.50 U	0.50 U	0.20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	0.30	1.0 U	8.0 J	250 U	7.0	200 U	59 U	5.2 U	0.20 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene Chloride	5 ug/L	0.50 U	0.50 U	0.40 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U	0.40 U	0.40 U	1.0 U	10 U	81 J	4.0 J	500 U	410	5.1 U	0.40 U	20 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5 ug/L	0.40 U	0.40 U	0.40 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	NA	0.40 U	0.40 U	1.0 U	10 U	250 U	7.0	200 U	62 U	4.5 U	0.80	20 U	0.38 J	0.33 J	0.28 J	1.0 U	NA	1.0 U	NA
Trichloroethene	5 ug/L	0.40 U	0.40 U	0.40 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.40 U	0.40 U	1.0 U	59	250 U	57	200 U	44 U	9.2 U	9.9	5.9 J	7.7	4.7	5.1	7.7	6	3.7	9.8
cis-1,2-Dichloroethene	ug/L	NA	0.40 U	0.30 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	1.0 U	1.0 U	0.30 U	0.30 U	1.0 U	NA	NA	NA	NA	NA	9.1	7.8	20 U	5.3	5.2	5.7	NA	6.5	6.6	8.3
Vinyl Chloride	2 ug/L	0.30 U	0.30 U	0.20 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U	0.20 U	1.0 U	240 JD	520	210	200 U	350	20	20	8.3 J	4.7	6.9	5.8	2.9	4.5	4.0	6.7
0 1 0: 10:1																														
Carbon Disulfide	1000 ug/L	0.30 U	0.30 U	0.40 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	NA	0.40 U	0.40 U	1.0 U	10 U	250 U	2.0 U	200 U	56 U	3.4 U	0.40 U	20 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	NA
Carbon Disulfide	1		1												ı															
Carbon Disulfide	Location ID:	MW-16	MW-16	MW-16	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18
	Location ID: Sample Date:		1												ı															
Volatile Organics	Location ID: Sample Date: CAO Goal Units	MW-16 10/08/20	MW-16 9/14/2021	MW-16 09/15/22	MW-17 10/22/97	MW-17 02/24/98	MW-17 07/22/98	MW-17 12/14/98	MW-17 04/13/99	MW-17 03/16/06	MW-17 12/07/06	MW-17 05/02/11	MW-18 10/22/97	MW-18 02/24/98	MW-18 07/22/98	MW-18 12/14/98	MW-18 04/13/99	MW-18 11/16/01	MW-18 10/07/02	MW-18 03/03/03	MW-18 10/09/03	MW-18 03/18/04	MW-18 10/11/04	MW-18 03/23/05	MW-18 09/23/05	MW-18 03/16/06	MW-18 06/08/06	MW-18 06/22/06	MW-18 01/03/08	MW-18 01/03/08
Volatile Organics 1,1,2-Trichloroethane	Location ID: Sample Date: CAO Goal ¹ Units 5 ug/L	MW-16 10/08/20	MW-16 9/14/2021	MW-16 09/15/22	MW-17 10/22/97	MW-17 02/24/98	MW-17 07/22/98	MW-17 12/14/98 2.0 U	MW-17 04/13/99 0.35 U	MW-17 03/16/06 0.30 U	MW-17 12/07/06	MW-17 05/02/11	MW-18 10/22/97	MW-18 02/24/98	MW-18 07/22/98 2.0 U	MW-18 12/14/98 4.0 U	MW-18 04/13/99 1.8 U	MW-18 11/16/01 2.0 U	MW-18 10/07/02 5.6 U	MW-18 03/03/03	MW-18 10/09/03 6.8 U	MW-18 03/18/04 6.8 U	MW-18 10/11/04	MW-18 03/23/05 5.6 U	MW-18 09/23/05	MW-18 03/16/06 6.6 U	MW-18 06/08/06 8.2 U	MW-18 06/22/06 8.2 U	MW-18 01/03/08 2.2 U	MW-18 01/03/08 2.2 U
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane	Location ID: Sample Date: CAO Goal Units 5 ug/L 5 ug/L	MW-16 10/08/20 1.0 U 0.63 J	MW-16 9/14/2021 1.0 U 1.0 UJ	MW-16 09/15/22 1.0 U 1.0 U	MW-17 10/22/97	MW-17 02/24/98 10 U 10 U	MW-17 07/22/98	MW-17 12/14/98 2.0 U 2.0 U	MW-17 04/13/99 0.35 U 0.21 U	MW-17 03/16/06 0.30 U 0.30 U	MW-17 12/07/06 0.20 U 0.30 U	MW-17 05/02/11	MW-18 10/22/97	MW-18 02/24/98 10 U 370 D	MW-18 07/22/98 2.0 U 350 D	MW-18 12/14/98 4.0 U 490 D	MW-18 04/13/99 1.8 U 740	MW-18 11/16/01	MW-18 10/07/02	MW-18 03/03/03 1.4 U 420	MW-18 10/09/03 6.8 U 2,100	MW-18 03/18/04 6.8 U 2,500	MW-18 10/11/04 14 U 3,600	MW-18 03/23/05 5.6 U 3,500	MW-18 09/23/05 16 U 3,400	MW-18 03/16/06 6.6 U 3,600	MW-18 06/08/06 8.2 U 4,800	MW-18 06/22/06 8.2 U 4,600	MW-18 01/03/08 2.2 U 920	MW-18 01/03/08 2.2 U 1,400
Volatile Organics 1.1,2-Trichloroethane 1.2-Dichloroethane Chloroethane	Location ID: Sample Date: CAO Goal	MW-16 10/08/20	MW-16 9/14/2021 1.0 U 1.0 UJ 1.0 U	MW-16 09/15/22 1.0 U 1.0 U 1.0 U	MW-17 10/22/97 10 U 10 U NA	MW-17 02/24/98 10 U 10 U NA	2.0 U 2.0 U NA	MW-17 12/14/98 2.0 U 2.0 U NA	MW-17 04/13/99 0.35 U	03/16/06 0.30 U 0.30 U NA	MW-17 12/07/06 0.20 U 0.30 U 0.40 U	MW-17 05/02/11 1.0 U 1.0 U	MW-18 10/22/97 10 U 10 U NA	MW-18 02/24/98 10 U 370 D NA	MW-18 07/22/98 2.0 U 350 D NA	MW-18 12/14/98 4.0 U 490 D NA	MW-18 04/13/99 1.8 U	MW-18 11/16/01 2.0 U 960	MW-18 10/07/02 5.6 U 1,800 NA	MW-18 03/03/03 1.4 U 420 220	MW-18 10/09/03 6.8 U 2,100 620	MW-18 03/18/04 6.8 U 2,500 NA	MW-18 10/11/04	MW-18 03/23/05 5.6 U 3,500 1,400	MW-18 09/23/05 16 U 3,400 1,700	MW-18 03/16/06 6.6 U 3,600 NA	MW-18 06/08/06 8.2 U 4,800 1,400	MW-18 06/22/06 8.2 U 4,600 2,000	MW-18 01/03/08 2.2 U 920 360	MW-18 01/03/08 2.2 U 1,400 590
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane Chloroethane Chloroform	Location ID: Sample Date: CAO Goal! Units 5	MW-16 10/08/20 1.0 U 0.63 J 1.0 U	MW-16 9/14/2021 1.0 U 1.0 UJ	MW-16 09/15/22 1.0 U 1.0 U	MW-17 10/22/97	MW-17 02/24/98 10 U 10 U NA 10 U	MW-17 07/22/98 2.0 U 2.0 U	MW-17 12/14/98 2.0 U 2.0 U	04/13/99 0.35 U 0.21 U NA	MW-17 03/16/06 0.30 U 0.30 U	MW-17 12/07/06 0.20 U 0.30 U	MW-17 05/02/11 1.0 U 1.0 U 1.0 U	MW-18 10/22/97 10 U 10 U NA 10 U	MW-18 02/24/98 10 U 370 D	MW-18 07/22/98 2.0 U 350 D	MW-18 12/14/98 4.0 U 490 D NA 4.0 U	MW-18 04/13/99 1.8 U 740	MW-18 11/16/01 2.0 U 960 NA	MW-18 10/07/02 5.6 U 1,800	MW-18 03/03/03 1.4 U 420	MW-18 10/09/03 6.8 U 2,100	MW-18 03/18/04 6.8 U 2,500 NA 3.8 U	MW-18 10/11/04 14 U 3,600	MW-18 03/23/05 5.6 U 3,500	MW-18 09/23/05 16 U 3,400 1,700 26 U	MW-18 03/16/06 6.6 U 3,600	MW-18 06/08/06 8.2 U 4,800	MW-18 06/22/06 8.2 U 4,600	MW-18 01/03/08 2.2 U 920 360 2.0 U	MW-18 01/03/08 2.2 U 1,400 590 2.0 U
Volatile Organics 1.1,2-Trichloroethane 1.2-Dichloroethane Chloroethane	Location ID: Sample Date: CAO Goal! Units 5	MW-16 10/08/20 1.0 U 0.63 J 1.0 U 1.0 U	MW-16 9/14/2021 1.0 U 1.0 UJ 1.0 U 1.0 UJ	MW-16 09/15/22 1.0 U 1.0 U 1.0 U 1.0 U	MW-17 10/22/97 10 U 10 U NA 10 U	MW-17 02/24/98 10 U 10 U NA	2.0 U 2.0 U 2.0 U NA 2.0 U	MW-17 12/14/98 2.0 U 2.0 U NA 2.0 U	MW-17 04/13/99 0.35 U 0.21 U NA 0.59 U	03/16/06 0.30 U 0.30 U NA 0.50 U	MW-17 12/07/06 0.20 U 0.30 U 0.40 U 0.20 U	1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	MW-18 10/22/97 10 U 10 U NA	MW-18 02/24/98 10 U 370 D NA 10 U	MW-18 07/22/98 2.0 U 350 D NA 2.0 U	MW-18 12/14/98 4.0 U 490 D NA	MW-18 04/13/99 1.8 U 740 NA 3.0 U	MW-18 11/16/01 2.0 U 960 NA 1.9 U	MW-18 10/07/02 5.6 U 1,800 NA 5.0 U	MW-18 03/03/03 1.4 U 420 220 1.2 U	MW-18 10/09/03 6.8 U 2,100 620 3.8 U	MW-18 03/18/04 6.8 U 2,500 NA	MW-18 10/11/04 14 U 3,600 1,200 17 U	MW-18 03/23/05 5.6 U 3,500 1,400 6.8 U	MW-18 09/23/05 16 U 3,400 1,700	MW-18 03/16/06 6.6 U 3,600 NA 10 U	8.2 U 4,800 1,400 13 U	8.2 U 4,600 2,000 13 U	MW-18 01/03/08 2.2 U 920 360	MW-18 01/03/08 2.2 U 1,400 590
Volatile Organics 1.1,2-Trichloroethane 1.2-Dichloroethane Chloroethane Chloroform Methylene Chloride	Location ID: Sample Date: CAO Goal* Units 5 ug/L ug/L 0.19 ug/L 5 ug/L	MW-16 10/08/20 1.0 U 0.63 J 1.0 U 1.0 U 1.0 U	MW-16 9/14/2021 1.0 U 1.0 UJ 1.0 U 1.0 UJ	1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	MW-17 10/22/97 10 U 10 U NA 10 U 10 U	MW-17 02/24/98 10 U 10 U NA 10 U 10 U	2.0 U 2.0 U 2.0 U NA 2.0 U 5.0 U	MW-17 12/14/98 2.0 U 2.0 U NA 2.0 U 5.0 U	MW-17 04/13/99 0.35 U 0.21 U NA 0.59 U 1.1 U	0.30 U 0.30 U 0.30 U NA 0.50 U 0.50 U	MW-17 12/07/06 0.20 U 0.30 U 0.40 U 0.20 U 0.40 U	MW-17 05/02/11 1.0 U 1.0 U 1.0 U 1.0 U	MW-18 10/22/97 10 U 10 U 10 U NA 10 U	MW-18 02/24/98 10 U 370 D NA 10 U	MW-18 07/22/98 2.0 U 350 D NA 2.0 U 5.0 U	MW-18 12/14/98 4.0 U 490 D NA 4.0 U 10 U	MW-18 04/13/99 1.8 U 740 NA 3.0 U 5.6 U	2.0 U 960 NA 1.9 U	MW-18 10/07/02 5.6 U 1,800 NA 5.0 U 18 U	MW-18 03/03/03 1.4 U 420 220 1.2 U 4.4 U	MW-18 10/09/03 6.8 U 2,100 620 3.8 U 16 U	MW-18 03/18/04 6.8 U 2,500 NA 3.8 U 16 U	MW-18 10/11/04 14 U 3,600 1,200 17 U 46 U	MW-18 03/23/05 5.6 U 3,500 1,400 6.8 U 18 U	MW-18 09/23/05 16 U 3,400 1,700 26 U 26 U	MW-18 03/16/06 6.6 U 3,600 NA 10 U	8.2 U 4,800 1,400 13 U	8.2 U 4,600 2,000 13 U 13 U	MW-18 01/03/08 2.2 U 920 360 2.0 U 4.0 U	MW-18 01/03/08 2.2 U 1,400 590 2.0 U 4.0 U
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane Chloroethane Chloroethane Chloroform Methylene Chloride Tetrachloroethane Trichloroethane Trichloroethane	Location ID: Sample Date: CAO Goal. Units 5 upt. 5 upt. 6 upt. 9.19 upt. 5 upt. 5 upt. 5 upt. 15 upt. 15 upt. 16 upt. 17 upt. 18 upt. 19 upt. 20 upt. 21 upt.	MW-16 10/08/20 1.0 U 0.63 J 1.0 U 1.0 U 1.0 U 1.0 U 2.6 4.2	1.0 U 1.0 U 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ NA 1.0 UJ	MW-16 09/15/22 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 3.7 6.7	MW-17 10/22/97 10 U 10 U NA 10 U 10 U 10 U 10 U NA	MW-17 02/24/98 10 U 10 U NA 10 U 10 U 10 U 10 U NA	2.0 U 2.0 U 2.0 U NA 2.0 U 5.0 U 2.0 U	2.0 U 2.0 U 2.0 U NA 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U	MW-17 04/13/99 0.35 U 0.21 U NA 0.59 U 1.1 U 0.62 U 0.44 U NA	0.30 U 0.30 U 0.30 U NA 0.50 U 0.50 U 0.40 U 0.40 U	0.20 U 0.30 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U	1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	10 U	MW-18 02/24/98 10 U 370 D NA 10 U 10 U 10 U 10 U	MW-18 07/22/98 2.0 U 350 D NA 2.0 U 5.0 U 2.0 U 2.0 U NA	MW-18 12/14/98 4.0 U 490 D NA 4.0 U 10 U 4.0 U 4.0 U NA	MW-18 04/13/99 1.8 U 740 NA 3.0 U 5.6 U 3.1 U	MW-18 11/16/01 2.0 U 960 NA 1.9 U 10 U 2.8 U 3.1 U NA	MW-18 10/07/02 5.6 U 1,800 NA 5.0 U 18 U 4.8 U 2.4 U NA	MW-18 03/03/03 1.4 U 420 220 1.2 U 4.4 U 1.2 U 0.60 U 1.6 U	6.8 U 2,100 620 3.8 U 16 U 6.2 U 3.6 U 4.8 U	MW-18 03/18/04 6.8 U 2,500 NA 3.8 U 16 U 6.2 U 3.6 U NA	MW-18 10/11/04 14 U 3,600 1,200 17 U 46 U 18 U 20 U 18 U	MW-18 03/23/05 5.6 U 3,500 1,400 6.8 U 18 U 7.2 U 8.0 U 7.0 U	MW-18 09/23/05 16 U 3,400 1,700 26 U 26 U 22 U 18 U 22 U	MW-18 03/16/06 6.6 U 3,600 NA 10 U 10 U 9.0 U 7.4 U NA	MW-18 06/08/06 8.2 U 4,800 1,400 13 U 13 U 11 U 9.2 U 11 U	8.2 U 4,600 2,000 13 U 11 U	MW-18 01/03/08 2.2 U 920 360 2.0 U 4.0 U 4.2 U 3.6 U 2.8 U	MW-18 01/03/08 2.2 U 1,400 590 2.0 U 4.0 U 4.2 U 3.6 U 2.8 U
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane Chlorotorm Methylene Chloride Tetrachloroethane Trichloroethane richloroethane isi-1,2-Dichloroethene viryl Chloride	Location ID: Sample Date: CAO Goal* Units 5 ug/L 5 ug/L 0.19 ug/L 5 ug/L 5 ug/L 0.19 ug/L 5 ug/L 2 ug/L 2 ug/L 2 ug/L 2 ug/L 2 ug/L	MW-16 10/08/20 1.0 U 0.63 J 1.0 U 1.0 U 1.0 U 2.6 4.2 2.4	1.0 U 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ NA 1.0 UJ 1.0 UJ	MW-16 09/15/22 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 3.7 6.7	10 U	MW-17 02/24/98 10 U 10 U NA 10 U 10 U 10 U 10 U 10 U 10 U	07/22/98 2.0 U 2.0 U NA 2.0 U 5.0 U 2.0 U 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U 2.0 U 0.0 U	MW-17 12/14/98 2.0 U 2.0 U NA 2.0 U 5.0 U 2.0 U 2.0 U NA 2.0 U	MW-17 04/13/99 0.35 U 0.21 U NA 0.59 U 1.1 U 0.62 U 0.44 U NA 0.71 U	0.30 U 0.30 U 0.30 U NA 0.50 U 0.40 U 0.40 U 0.40 U NA	0.20 U 0.30 U 0.40 U 0.20 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.30 U	MW-17 05/02/11 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	10 U	MW-18 02/24/98 10 U 370 D NA 10 U 10 U 10 U 10 U 10 U 10 U	MW-18 07/22/98 2.0 U 350 D NA 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U NA 2.0 U	MW-18 12/14/98 4.0 U 490 D NA 4.0 U 10 U 4.0 U 4.0 U NA 4.0 U	MW-18 04/13/99 1.8 U 740 NA 3.0 U 5.6 U 3.1 U 2.2 U NA 3.6 U	MW-18 11/16/01 2.0 U 960 NA 1.9 U 10 U 2.8 U 3.1 U NA 2.3 U	MW-18 10/07/02 5.6 U 1,800 NA 5.0 U 18 U 4.8 U 2.4 U NA 5.8 U	MW-18 03/03/03 1.4 U 420 220 1.2 U 4.4 U 1.2 U 0.60 U 1.6 U	MW-18 10/09/03 6.8 U 2,100 620 3.8 U 16 U 6.2 U 3.6 U 4.8 U	MW-18 03/18/04 6.8 U 2,500 NA 3.8 U 16 U 6.2 U 3.6 U NA	MW-18 10/11/04 14 U 3,600 1,200 17 U 46 U 18 U 20 U 18 U 18 U	MW-18 03/23/05 5.6 U 3,500 1,400 6.8 U 18 U 7.2 U 8.0 U 7.0 U	MW-18 09/23/05 16 U 3,400 1,700 26 U 26 U 22 U 18 U 22 U 14 U	MW-18 03/16/06 6.6 U 3,600 NA 10 U 10 U 9.0 U 7.4 U NA 5.6 U	MW-18 06/08/06 8.2 U 4,800 1,400 13 U 13 U 11 U 9.2 U 11 U	MW-18 06/22/06 8.2 U 4,600 2,000 13 U 13 U 11 U 9.2 U 11 U	MW-18 01/03/08 2.2 U 920 360 2.0 U 4.0 U 4.2 U 3.6 U 2.8 U 3.8	MW-18 01/03/08 2.2 U 1,400 590 2.0 U 4.0 U 4.2 U 3.6 U 2.8 U 7.4
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane Chloroethane Chloroethane Chloroform Methylene Chloride Tetrachloroethane Trichloroethane Trichloroethane	Location ID: Sample Date: CAO Goal. Units 5 upt. 5 upt. 6 upt. 9.19 upt. 5 upt. 5 upt. 5 upt. 15 upt. 15 upt. 16 upt. 17 upt. 18 upt. 19 upt. 20 upt. 21 upt.	MW-16 10/08/20 1.0 U 0.63 J 1.0 U 1.0 U 1.0 U 1.0 U 2.6 4.2	1.0 U 1.0 U 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ NA 1.0 UJ	MW-16 09/15/22 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 3.7 6.7	MW-17 10/22/97 10 U 10 U NA 10 U 10 U 10 U 10 U NA	MW-17 02/24/98 10 U 10 U NA 10 U 10 U 10 U 10 U NA	MW-17 07/22/98 2.0 U 2.0 U NA 2.0 U 5.0 U 2.0 U 2.0 U	2.0 U 2.0 U 2.0 U NA 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U	MW-17 04/13/99 0.35 U 0.21 U NA 0.59 U 1.1 U 0.62 U 0.44 U NA	0.30 U 0.30 U 0.30 U NA 0.50 U 0.50 U 0.40 U 0.40 U	0.20 U 0.30 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U	1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	10 U	MW-18 02/24/98 10 U 370 D NA 10 U 10 U 10 U 10 U	MW-18 07/22/98 2.0 U 350 D NA 2.0 U 5.0 U 2.0 U 2.0 U NA	MW-18 12/14/98 4.0 U 490 D NA 4.0 U 10 U 4.0 U 4.0 U NA	MW-18 04/13/99 1.8 U 740 NA 3.0 U 5.6 U 3.1 U 2.2 U	MW-18 11/16/01 2.0 U 960 NA 1.9 U 10 U 2.8 U 3.1 U NA	MW-18 10/07/02 5.6 U 1,800 NA 5.0 U 18 U 4.8 U 2.4 U NA	MW-18 03/03/03 1.4 U 420 220 1.2 U 4.4 U 1.2 U 0.60 U 1.6 U	6.8 U 2,100 620 3.8 U 16 U 6.2 U 3.6 U 4.8 U	MW-18 03/18/04 6.8 U 2,500 NA 3.8 U 16 U 6.2 U 3.6 U NA	MW-18 10/11/04 14 U 3,600 1,200 17 U 46 U 18 U 20 U 18 U	MW-18 03/23/05 5.6 U 3,500 1,400 6.8 U 18 U 7.2 U 8.0 U 7.0 U	MW-18 09/23/05 16 U 3,400 1,700 26 U 26 U 22 U 18 U 22 U	MW-18 03/16/06 6.6 U 3,600 NA 10 U 10 U 9.0 U 7.4 U NA	MW-18 06/08/06 8.2 U 4,800 1,400 13 U 13 U 11 U 9.2 U 11 U	8.2 U 4,600 2,000 13 U 13 U 11 U 9.2 U	MW-18 01/03/08 2.2 U 920 360 2.0 U 4.0 U 4.2 U 3.6 U 2.8 U	MW-18 01/03/08 2.2 U 1,400 590 2.0 U 4.0 U 4.2 U 3.6 U 2.8 U
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane Chlorotorm Methylene Chloride Tetrachloroethane Trichloroethane richloroethane isi-1,2-Dichloroethene viryl Chloride	Location ID: Sample Date: CAO Goal* Units 5 ug/L 5 ug/L 0.19 ug/L 5 ug/L 5 ug/L 0.19 ug/L 5 ug/L 2 ug/L 2 ug/L 2 ug/L 2 ug/L 2 ug/L	MW-16 10/08/20 1.0 U 0.63 J 1.0 U 1.0 U 1.0 U 1.0 U 2.6 4.2 2.4 NA	MW-16 9/14/2021 1.0 U 1.0 UJ 1.0 UJ 1.0 UJ NA 1.0 UJ NA 1.0 UJ NA 1.0 UJ NA NA	MW-16 09/15/22 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 3.7 6.7 4.6 1.0 U	MW-17 10/22/97 10 U 10 U NA 10 U 10 U 10 U 10 U 10 U 10 U 10 U 10 U	MW-17 02/24/98 10 U 10 U NA 10 U 10 U 10 U 10 U 10 U 10 U 10 U 10 U	MW-17 07/22/98 2.0 U 2.0 U NA 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U	MW-17 12/14/98 2.0 U 2.0 U NA 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U	MW-17 04/13/99 0.35 U 0.21 U NA 0.59 U 1.1 U 0.62 U 0.44 U NA 0.71 U	MW-17 03/16/06 0.30 U 0.30 U NA 0.50 U 0.40 U 0.40 U 0.40 U NA 0.30 U	MW-17 12/07/06 0.20 U 0.30 U 0.40 U 0.20 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U 0.40 U	MW-17 05/02/11 1.0 U 1.0 U	MW-18 10/22/97 10 U 10 U NA 10 U 10 U 10 U 10 U 10 U 10 U NA 10 U 10 U	MW-18 02/24/98 10 U 370 D NA 10 U 10 U 10 U 10 U 10 U 10 U 10 U 10 U	MW-18 07/22/98 2.0 U 350 D NA 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U	MW-18 12/14/98 4.0 U 490 D NA 4.0 U 4.0 U 4.0 U NA 4.0 U NA 4.0 U	MW-18 04/13/99 1.8 U 740 NA 3.0 U 5.6 U 3.1 U 2.2 U NA 3.6 U 2.8 U	MW-18 11/16/01 2.0 U 960 NA 1.9 U 10 U 2.8 U 3.1 U NA 2.3 U 2.5 U	MW-18 10/07/02 5.6 U 1,800 NA 5.0 U 18 U 4.8 U 2.4 U NA 5.8 U 6.0 U	MW-18 03/03/03 1.4 U 420 220 1.2 U 4.4 U 1.2 U 0.60 U 1.6 U 1.4 U 1.5 U	MW-18 10/09/03 6.8 U 2,100 620 3.8 U 16 U 6.2 U 3.6 U 4.8 U 11 U 4.8 U	MW-18 03/18/04 6.8 U 2,500 NA 3.8 U 16 U 6.2 U 3.6 U NA 11 U 4.8 U	MW-18 10/11/04 14 U 3,600 1,200 1,200 17 U 46 U 18 U 20 U 18 U 18 U 12 U	MW-18 03/23/05 5.6 U 3,500 1,400 6.8 U 18 U 7.2 U 8.0 U 7.0 U 7.0 U 5.0 U	MW-18 09/23/05 16 U 3,400 1,700 26 U 26 U 22 U 18 U 22 U 14 U	MW-18 03/16/06 6.6 U 3,600 NA 10 U 9.0 U 7.4 U NA 5.6 U 6.8 U	MW-18 06/08/06 8.2 U 4,800 1,400 13 U 11 U 9.2 U 11 U 14 8.5 U	MW-18 06/22/06 8.2 U 4,600 2,000 13 U 13 U 11 U 9.2 U 11 U	MW-18 01/03/08 2.2 U 920 360 2.0 U 4.0 U 4.2 U 3.6 U 2.8 U 3.8 4.4 U	MW-18 01/03/08 2.2 U 1,400 590 2.0 U 4.0 U 4.2 U 3.6 U 2.8 U 7.4 4.4 U
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane Chlorotorm Methylene Chloride Tetrachloroethane Trichloroethane richloroethane isi-1,2-Dichloroethene viryl Chloride	Location ID:	MW-16 10/08/20 1.0 U 0.63 J 1.0 U 1.0 U 1.0 U 2.6 4.2 2.4 NA	MW-16 9/14/2021 1.0 U 1.0 UJ 1.0 UJ 1.0 UJ NA 1.0 UJ NA 1.0 UJ NA 1.0 UJ NA	MW-16 09/15/22 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 3.7 6.7 4.6 1.0 U	MW-17 10/22/97 10 U 10 U 10 U NA 10 U 10 U 10 U 10 U 10 U NA 10 U 10 U 10 U 10 U 10 U 10 U 10 U	MW-17 02/24/98 10 U 10 U NA 10 U 10 U 10 U 10 U 10 U 10 U 10 U 10 U	MW-17 07/22/98 2.0 U 2.0 U NA 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U	MW-17 12/14/98 2.0 U 2.0 U NA 2.0 U 5.0 U 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U 0.0 U	MW-17 04/13/99 0.35 U 0.21 U NA 0.59 U 1.1 U 0.62 U 0.44 U NA 0.71 U 0.56 U	MW-17 03/16/06 0.30 U 0.30 U 0.30 U NA 0.50 U 0.40 U 0.40 U NA 0.30 U 0.30 U	MW-17 12/07/06 0.20 U 0.30 U 0.40 U 0.20 U 0.40 U 0.40 U 0.40 U 0.40 U 0.30 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U	MW-17 05/02/11 1.0 U 1.0 U	MW-18 10/22/97 10 U 10 U 10 U 10 U 10 U 10 U 10 U 10 U	MW-18 02/24/98 10 U 370 D NA 10 U 10 U 10 U 10 U 10 U 10 U 10 U 10 U	MW-18 07/22/98 2.0 U 350 D NA 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U WM-18 (14.67)	MW-18 12/14/98 4.0 U 490 D NA 4.0 U 10 U 4.0 U 4.0 U NA 4.0 U MW-18 (7.67)	MW-18 04/13/99 1.8 U 740 NA 3.0 U 5.6 U 3.1 U 2.2 U NA 3.6 U 2.8 U	MW-18 11/16/01 2.0 U 960 NA 1.9 U 10 U 2.8 U 3.1 U NA 2.3 U 2.5 U	MW-18 10/07/02 5.6 U 1,800 NA 5.0 U 18 U 4.8 U 2.4 U NA 5.8 U 6.0 U	MW-18 03/03/03 1.4 U 420 220 1.2 U 4.4 U 1.2 U 0.60 U 1.6 U 1.5 U	MW-18 10/09/03 6.8 U 2,100 620 3.8 U 16 U 6.2 U 3.6 U 4.8 U 11 U 4.8 U	MW-18 03/18/04 6.8 U 2,500 NA 3.8 U 16 U 6.2 U 3.6 U NA 11 U 4.8 U	MW-18 10/11/04 14 U 3,600 1,200 17 U 46 U 18 U 20 U 18 U 18 U 12 U MW-18 (31)	MW-18 03/23/05 5.6 U 3,500 1,400 6.8 U 18 U 7.2 U 8.0 U 7.0 U 5.0 U	MW-18 09/23/05 16 U 3,400 1,700 26 U 22 U 18 U 22 U 14 U 17 U MW-19D1	MW-18 03/16/06 6.6 U 3,600 NA 10 U 10 U 9.0 U 7.4 U NA 5.6 U 6.8 U	MW-18 06/08/06 8.2 U 4,800 1,400 13 U 11 U 9.2 U 11 U 9.5 U 14 8.5 U MW-19D1	MW-18 06/22/06 8.2 U 4,600 2,000 13 U 11 U 9.2 U 11 U 9.5 U 13 8.5 U MW-19D1	MW-18 01/03/08 2.2 U 920 360 2.0 U 4.0 U 4.2 U 3.6 U 2.8 U 3.8 4.4 U	MW-18 01/03/08 2.2 U 1,400 590 2.0 U 4.0 U 4.2 U 3.6 U 2.8 U 7.4 4.4 U
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chloroethane Chlorotorm Methylene Chloride Tetrachloroethane Trichloroethane Trichloroethane Dis-1,2-Dichloroethane User 1,2-Dichloroethane Carbon Daulide Carbon Daulide	Location ID: Sample Date:	MW-16 10/08/20 1.0 U 0.63 J 1.0 U 1.0 U 1.0 U 1.0 U 2.6 4.2 2.4 NA	MW-16 9/14/2021 1.0 U 1.0 UJ 1.0 UJ 1.0 UJ NA 1.0 UJ NA 1.0 UJ NA 1.0 UJ	MW-16 09/15/22 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 3.7 6.7 4.6 1.0 U	MW-17 10/22/97 10 U 10 U NA 10 U 10 U 10 U 10 U 10 U 10 U 10 U 10 U	MW-17 02/24/98 10 U 10 U NA 10 U 10 U 10 U 10 U 10 U 10 U 10 U 10 U	MW-17 07/22/98 2.0 U 2.0 U NA 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U	MW-17 12/14/98 2.0 U 2.0 U NA 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U	MW-17 04/13/99 0.35 U 0.21 U NA 0.59 U 1.1 U 0.62 U 0.44 U NA 0.71 U	MW-17 03/16/06 0.30 U 0.30 U NA 0.50 U 0.40 U 0.40 U 0.40 U NA 0.30 U	MW-17 12/07/06 0.20 U 0.30 U 0.40 U 0.20 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U 0.40 U	MW-17 05/02/11 1.0 U 1.0 U	MW-18 10/22/97 10 U 10 U NA 10 U 10 U 10 U 10 U 10 U 10 U NA 10 U 10 U	MW-18 02/24/98 10 U 370 D NA 10 U 10 U 10 U 10 U 10 U 10 U 10 U 10 U	MW-18 07/22/98 2.0 U 350 D NA 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U	MW-18 12/14/98 4.0 U 490 D NA 4.0 U 4.0 U 4.0 U NA 4.0 U NA 4.0 U	MW-18 04/13/99 1.8 U 740 NA 3.0 U 5.6 U 3.1 U 2.2 U NA 3.6 U 2.8 U	MW-18 11/16/01 2.0 U 960 NA 1.9 U 10 U 2.8 U 3.1 U NA 2.3 U 2.5 U	MW-18 10/07/02 5.6 U 1,800 NA 5.0 U 18 U 4.8 U 2.4 U NA 5.8 U 6.0 U	MW-18 03/03/03 1.4 U 420 220 1.2 U 4.4 U 1.2 U 0.60 U 1.6 U 1.4 U 1.5 U	MW-18 10/09/03 6.8 U 2,100 620 3.8 U 16 U 6.2 U 3.6 U 4.8 U 11 U 4.8 U	MW-18 03/18/04 6.8 U 2,500 NA 3.8 U 6.2 U 3.6 U NA 11 U 4.8 U	MW-18 10/11/04 14 U 3,600 1,200 1,200 17 U 46 U 18 U 20 U 18 U 18 U 12 U	MW-18 03/23/05 5.6 U 3,500 1,400 6.8 U 18 U 7.2 U 8.0 U 7.0 U 7.0 U 5.0 U	MW-18 09/23/05 16 U 3,400 1,700 26 U 26 U 22 U 18 U 22 U 14 U 17 U	MW-18 03/16/06 6.6 U 3,600 NA 10 U 9.0 U 7.4 U NA 5.6 U 6.8 U	MW-18 06/08/06 8.2 U 4,800 1,400 13 U 11 U 9.2 U 11 U 14 8.5 U	MW-18 06/22/06 8.2 U 4,600 2,000 13 U 11 U 9.2 U 11 U 13 8.5 U	MW-18 01/03/08 2.2 U 920 360 2.0 U 4.0 U 4.2 U 3.6 U 2.8 U 3.8 4.4 U	MW-18 01/03/08 2.2 U 1,400 590 2.0 U 4.0 U 4.2 U 3.6 U 2.8 U 7.4 4.4 U
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chloroform Methylene Chloride Tetrachloroethane Trichloroethane cis-1,2-Dichloroethane cis-1,2-Dichloroethane Carbon Disulfide Volatile Organics	Location ID: Sample Date: CAO Goal Units 5 ug/L 5 ug/L 5 ug/L 0.19 ug/L 5 ug/L 5 ug/L 100 ug/L Location ID: Sample Date: CAO Goal Units	MW-16 10/08/20 1.0 U 0.63 J 1.0 U 1.0 U 1.0 U 2.6 4.2 2.4 NA MW-18	MW-16 9/14/2021 1.0 U NA 1.0 U NA	MW-16 09/15/22 1.0 U 1.0	MW-17 10/22/97 10 U 10 U NA 10 U 10 U 10 U 10 U 10 U 10 U 10 U 10 U	MW-17 02/24/98 10 U 10 U NA 10 U 10 U 10 U 10 U NA 10 U 10 U 10 U NA 10 U 10 U NA 10 U 10 U NA 10 U 10 U	MW-17 07/22/98 2.0 U 2.0 U NA 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U 2.0 U 0.0 U 0.0 U 0.0 U 0.0 U 0.0 U 0.0 U 0.0 U	MW-17 12/14/98 2.0 U 2.0 U NA 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U 2.0 U 1.0 U 2.0 U 1.0 U	MW-17 04/13/99 0.35 U 0.21 U NA 0.59 U 1.1 U 0.62 U 0.44 U NA 0.71 U 0.56 U	0.30 U 0.30 U 0.50 U 0.40 U 0.30 U 0.30 U 0.40 U 0.30 U 0.40 U 0.40 U 0.40 U 0.30 U 0.40 U 0.	MW-17 12/07/06 0.20 U 0.30 U 0.40 U 0.20 U 0.40 U	MW-17 05/02/11 1.0 U 1.0 U	MW-18 10/22/97 10 U 10 U NA 10 U 10 U 10 U 10 U NA 10 U 10 U 10 U NA 10 U 10 U NA 10 U 10 U 10 U NA 10 U 10 U 10 U 10 U 10 U 10 U	MW-18 02/24/98 10 U 370 D NA 10 U 10 U 10 U 10 U 10 U 10 U 10 U 10 U	MW-18 07/22/98 2.0 U 350 D NA 2.0 U 5.0 U 2.0 U NA 2.0 U 2.0 U W-18 (14.67)	MW-18 12/14/98 4.0 U 490 D NA 4.0 U 10 U 4.0 U 4.0 U NA 4.0 U MW-18 (7.67) 09/20/19	MW-18 04/13/99 1.8 U 740 NA 3.0 U 5.6 U 3.1 U 2.2 U NA 3.6 U 2.8 U	MW-18 11/16/01 2.0 U 960 NA 1.9 U 10 U 2.8 U 3.1 U NA 2.3 U 2.5 U MW-18 (14.67)	MW-18 10/07/02 5.6 U 1,800 NA 5.0 U 18 U 4.8 U 2.4 U NA 5.8 U 6.0 U	MW-18 03/03/03 1.4 U 420 220 1.2 U 4.4 U 1.2 U 0.60 U 1.6 U 1.5 U MW-18 (7.67) 9/14/2021	MW-18 10/09/03 6.8 U 2,100 620 3.8 U 16 U 6.2 U 3.6 U 4.8 U 11 U 4.8 U MW-18 (14.67) 9/14/2021	MW-18 03/18/04 6.8 U 2.500 NA 3.8 U 16 U 6.2 U 3.6 U NA 11 U 4.8 U MW-18 (24)	MW-18 10/11/04 14 U 3.600 1,200 17 U 46 U 18 U 20 U 18 U 18 U 18 U 12 U MW-18 (31) 09/15/22	MW-18 03/23/05 5.6 U 3.500 1.400 6.8 U 18 U 7.2 U 8.0 U 7.0 U 7.0 U 7.0 U 9.0 U 9.0 U 9.0 U 9.0 U 9.0 U	MW-18 09/23/05 16 U 3,400 1,700 26 U 22 U 18 U 22 U 14 U 17 U MW-19D1 12/19/01	MW-18 03/16/06 6.6 U 3,600 NA 10 U 10 U 9,0 U 7.4 U NA 5.6 U 6.8 U MW-19D1	MW-18 06/08/06 8.2 U 4,800 1,400 13 U 11 U 9.2 U 11 U 14 8.5 U MW-19D1 03/03/03	MW-18 06/22/06 8.2 U 4,600 2,000 13 U 13 U 11 U 9.2 U 13 8.5 U MW-19D1 10/09/03	MW-18 01/03/08 2.2 U 920 360 2.0 U 4.0 U 4.2 U 3.6 U 2.8 U 3.8 4.4 U MW-19D1 03/18/04	MW-18 01/03/08 2.2 U 1,400 590 2.0 U 4.0 U 4.2 U 3.6 U 2.8 U 7.4 4.4 U MW-19D1
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chloroethane Chloroform Methylene Chloride Tetrachloroethane Trichloroethane Dis-1,2-Dichloroethane Vinyl Chloride Carbon Disullide Volatile Organics 1,1,2-Trichloroethane	Location ID:	MW-16 10/08/20 1.0 U 0.63 J 1.0 U 1.0 U 1.0 U 2.6 4.2 2.4 NA	MW-16 9/14/2021 1.0 U 1.0 UJ 1.0 UJ 1.0 UJ NA 1.0 UJ NA 1.0 UJ NA 1.0 UJ NA	MW-16 09/15/22 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 3.7 6.7 4.6 1.0 U	MW-17 10/22/97 10 U 10 U 10 U NA 10 U 10 U 10 U 10 U 10 U NA 10 U 10 U 10 U 10 U 10 U 10 U 10 U	MW-17 02/24/98 10 U 10 U NA 10 U 10 U 10 U 10 U 10 U 10 U 10 U 10 U	MW-17 07/22/98 2.0 U 2.0 U NA 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U	MW-17 12/14/98 2.0 U 2.0 U NA 2.0 U 5.0 U 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U 0.0 U	MW-17 04/13/99 0.35 U 0.21 U NA 0.59 U 1.1 U 0.62 U 0.44 U NA 0.71 U 0.56 U	MW-17 03/16/06 0.30 U 0.30 U 0.30 U NA 0.50 U 0.40 U 0.40 U NA 0.30 U 0.30 U	MW-17 12/07/06 0.20 U 0.30 U 0.40 U 0.20 U 0.40 U 0.40 U 0.40 U 0.40 U 0.30 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U	MW-17 05/02/11 1.0 U 1.0 U	MW-18 10/22/97 10 U 10 U NA 10 U	MW-18 02/24/98 10 U 370 D NA 10 U 10 U 10 U 10 U 10 U 10 U 10 U 10 U	MW-18 07/22/98 2.0 U 350 D NA 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U WM-18 (14.67)	MW-18 12/14/98 4.0 U 490 D NA 4.0 U 10 U 4.0 U 4.0 U NA 4.0 U MW-18 (7.67)	MW-18 04/13/99 1.8 U 740 NA 3.0 U 5.6 U 3.1 U 2.2 U NA 3.6 U 2.8 U	MW-18 11/16/01 2.0 U 960 NA 1.9 U 10 U 2.8 U 3.1 U NA 2.3 U 2.5 U	MW-18 10/07/02 5.6 U 1,800 NA 5.0 U 18 U 4.8 U 2.4 U NA 5.8 U 6.0 U	MW-18 03/03/03 1.4 U 420 220 1.2 U 4.4 U 1.2 U 0.60 U 1.6 U 1.5 U	MW-18 10/09/03 6.8 U 2,100 620 3.8 U 16 U 6.2 U 3.6 U 4.8 U 11 U 4.8 U	MW-18 03/18/04 6.8 U 2,500 NA 3.8 U 16 U 6.2 U 3.6 U NA 11 U 4.8 U	MW-18 10/11/04 14 U 3,600 1,200 17 U 46 U 18 U 20 U 18 U 18 U 12 U MW-18 (31)	MW-18 03/23/05 5.6 U 3,500 1,400 6.8 U 18 U 7.2 U 8.0 U 7.0 U 5.0 U	MW-18 09/23/05 16 U 3,400 1,700 26 U 22 U 18 U 22 U 14 U 17 U MW-19D1	MW-18 03/16/06 6.6 U 3,600 NA 10 U 10 U 9.0 U 7.4 U NA 5.6 U 6.8 U	MW-18 06/08/06 8.2 U 4,800 1,400 13 U 11 U 9.2 U 11 U 9.5 U 14 8.5 U MW-19D1	MW-18 06/22/06 8.2 U 4,600 2,000 13 U 11 U 9.2 U 11 U 9.5 U 13 8.5 U MW-19D1	MW-18 01/03/08 2.2 U 920 360 2.0 U 4.0 U 4.2 U 3.6 U 2.8 U 3.8 4.4 U	MW-18 01/03/08 2.2 U 1,400 590 2.0 U 4.0 U 4.2 U 3.6 U 2.8 U 7.4 4.4 U MW-19D1 10/12/04
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chloroform Methylene Chloride Tetrachloroethane Trichloroethane cis-1,2-Dichloroethane cis-1,2-Dichloroethane Carbon Disulfide Volatile Organics	Location ID: Sample Date: CAO Goal Units	MW-16 10/08/20 1.0 U 0.63 J 1.0 U 1.0 U 1.0 U 1.0 U 2.6 4.2 2.4 NA MW-18 05/02/11	MW-16 9/14/2021 1.0 U NA 1.0 U NA	MW-16 09/15/22 1.0 U MW-18 (7.67) 11/20/14	MW-17 10/22/97 10 U 10 U NA 10 U 10 U 10 U 10 U 10 U 10 U 10 U 10 U	MW-17 02/24/98 10 U 10 U NA 10 U 10 U 10 U 10 U NA 10 U 10 U 10 U NA 10 U 10 U NA 10 U 10 U NA 10 U 10 U	MW-17 07/22/98 2.0 U 2.0 U NA 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U 2.0 U 0.0 U 0.0 U 0.0 U 0.0 U 0.0 U 0.0 U 0.0 U	MW-17 12/14/98 2.0 U 2.0 U 2.0 U 5.0 U 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U 1.0 U 1.1/16/15	MW-17 04/13/99 0.35 U 0.25 U 0.21 U NA 0.59 U 1.1 U 0.62 U 0.44 U NA 0.71 U 0.56 U	0.30 U 0.30 U 0.50 U 0.40 U 0.30 U 0.30 U 0.40 U 0.30 U 0.40 U 0.40 U 0.40 U 0.30 U 0.40 U 0.	MW-17 12/07/06 0.20 U 0.30 U 0.40 U 0.20 U 0.40 U	MW-17 05/02/11 1.0 U 1.0 U	MW-18 10/22/97 10 U 10 U NA 10 U 10 U 10 U 10 U NA 10 U 10 U 10 U NA 10 U 10 U NA 10 U 10 U 10 U NA 10 U 10 U 10 U 10 U 10 U 10 U	MW-18 02/24/98 10 U 370 D NA 10 U 10 U 10 U 10 U 10 U 10 U NA 10 U 10 U NA 10 U	MW-18 07/22/98 2.0 U 350 D NA 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U 2.0 U MW-18 (14.67) 11/20/18	MW-18 12/14/98 4.0 U 490 D NA 4.0 U 10 U 4.0 U 4.0 U NA 4.0 U MW-18 (7.67) 09/20/19	MW-18 04/13/99 1.8 U 740 NA 3.0 U 5.6 U 3.1 U 2.2 U NA 3.6 U 2.8 U	MW-18 11/16/01 2.0 U 960 NA 1.9 U 10 U 2.8 U 3.1 U NA 2.3 U 2.5 U WW-18 (14.67) 10/08/20	MW-18 10/07/02 5.6 U 1,800 NA 5.0 U 18 U 4.8 U 2.4 U NA 5.8 U 6.0 U	MW-18 03/03/03 1.4 U 420 220 1.2 U 1.2 U 1.6 U 1.6 U 1.5 U MW-18 (7.67) 9/14/2021	MW-18 10/09/03 6.8 U 2.100 6.20 3.6 U 16 U 6.2 U 3.6 U 4.8 U 11 U 4.8 U 9/14/2021	MW-18 03/18/04 6.8 U 2,500 NA 3.8 U 16 U 6.2 U 3.6 U NA 11 U 4.8 U MW-18 (24) 09/14/22	MW-18 10/11/04 14 U 3.600 1,200 17 U 46 U 18 U 20 U 18 U 12 U MW-18 (31) 09/15/22	MW-18 03/23/05 5.6 U 3.500 1.400 6.8 U 18 U 7.2 U 8.0 U 7.0 U 7.0 U 7.0 U 9.0 U 9.0 U 9.0 U 9.0 U 9.0 U	MW-18 09/23/05 16 U 3,400 1,700 26 U 22 U 18 U 22 U 14 U 17 U MW-19D1 12/19/01	MW-18 03/16/06 6.6 U 3,600 NA 10 U 10 U 9,0 U 7.4 U NA 5.6 U 6.8 U MW-19D1	MW-18 06/08/06 8.2 U 4,800 1,400 13 U 11 U 9.2 U 11 U 14 8.5 U MW-19D1 03/03/03	MW-18 06/22/06 8.2 U 4,600 2,000 13 U 13 U 11 U 9.2 U 13 8.5 U MW-19D1 10/09/03	MW-18 01/03/08 2.2 U 920 380 2.0 U 4.0 U 4.2 U 3.6 U 2.8 U 2.8 U 3.8 4.4 U MW-19D1 03/18/04	MW-18 01/03/08 2.2 U 1.400 590 2.0 U 4.0 U 4.2 U 3.6 U 2.8 U 7.4 4.4 U MW-19D1
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chloroform Methylene Chloride Tetrachloroethane Trichloroethane richloroethane richloroethane cis-1,2-Dichloroethane Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane	Location ID: Sample Date: CAO Goal Units	MW-16 10/08/20 1.0 U 0.63 J 1.0 U 1.0 U 1.0 U 2.6 4.2 2.4 NA MW-18 05/02/11	MW-16 9/14/2021 1.0 U 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ NA	MW-16 09/15/22 1.0 U 1.0	MW-17 10/22/97 10 U 10 U NA 10 U	MW-17 02/24/98 10 U 10 U NA 10 U	MW-17 07/22/98 2.0 U 2.0 U NA 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U 4.0 U 2.0 U 0.0 U	MW-17 12/14/98 2.0 U 2.0 U NA 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U 10 NA 2.0 U 11/16/15 11/16/15	MW-17 04/13/99 0.35 U 0.21 U NA 0.59 U 1.1 U 0.62 U 0.44 U NA 0.71 U 0.56 U MW-18 (14.67) 11/16/15	MW-17 03/16/06 0.30 U 0.30 U NA 0.50 U 0.50 U 0.40 U 0.40 U NA 0.30 U 0.30 U MW-18 (14.67) 10/04/16	MW-17 12/07/06 0.20 U 0.30 U 0.40 U	MW-17 05/02/11 1.0 U 1.0 U	MW-18 10/22/97 10 U 10 U 10 U NA 10 U	MW-18 02/24/98 10 U 370 D NA 10 U 10 U 10 U 10 U 10 U 10 U 10 U 10 U	MW-18 07/22/98 2.0 U 350 D NA 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U MW-18 (14.67) 11/20/18	MW-18 12/14/98 4.0 U 490 D NA 4.0 U 10 U 4.0 U 4.0 U 4.0 U 4.0 U 4.0 U MM-18 (7.67) 09/20/19	MW-18 04/13/99 1.8 U 740 NA 3.0 U 5.6 U 3.1 U 2.2 U NA 3.6 U 2.8 U WW-18 (7.67) 10/08/20	MW-18 11/16/01 2.0 U 960 NA 1.9 U 10 U 2.8 U 3.1 U NA 2.3 U 2.5 U WW-18 (14.67) 10/08/20	MW-18 10/07/02 5.6 U 1,800 NA 5.0 U 18 U 4.8 U 2.4 U NA 5.8 U 6.0 U MW-18 (14.67) 09/20/19	MW-18 03/03/03 1.4 U 420 220 1.2 U 4.4 U 1.2 U 0.60 U 1.6 U 1.5 U MW-18 (7.67) 9/14/2021	MW-18 10/09/03 6.8 U 2,100 620 3.8 U 16 U 3.6 U 4.8 U 11 U 4.8 U MW-18 (14.67) 9/14/2021	MW-18 03/18/04 6.8 U 2,500 NA 3.8 U 16 U 6.2 U 3.6 U NA 11 U 4.8 U MW-18 (24) 09/14/22	MW-18 10/11/04 14 U 3,600 1,200 17 U 46 U 18 U 20 U 18 U 12 U 12 U MW-18 (31) 09/15/22	MW-18 03/23/05 5.6 U 3.500 1,400 6.8 U 18 U 7.2 U 8.0 U 7.0 U 7.0 U 5.0 U MW-19D1 08/07/00	MW-18 09/23/05 16 U 3,400 1,700 26 U 26 U 22 U 18 U 17 U MW-19D1 12/19/01	MW-18 03/16/06 6.6 U 3,600 NA 10 U 10 U 9,0 U 7.4 U NA 5.6 U 6.8 U MW-19D1 10/07/02	MW-18 06/08/06 8.2 U 4,800 1,400 13 U 13 U 11 U 9.2 U 14 8.5 U MW-19D1 03/03/03	MW-18 06/22/06 8.2 U 4,600 2,000 13 U 13 U 11 U 9.2 U 11 U 9.5 U 13 B.5 U MW-19D1 10/09/03 U 120	MW-18 01/03/08 2.2 U 92/0 36/0 2.0 U 4.0 U 4.2 U 3.8 U 2.8 U 3.8 U 4.4 U MW-19D1 03/18/04	MW-18 01/03/08 2 2 U 1 4/00 590 2 .0 U 4 .0 U 4 2 U 3 6 U 7.4 4 4 U 7.4 4 4 U MW-19D1 0.50 190
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chloroethane Chloroform Methylene Chloride Tetrachloroethane Trichloroethane Dis-1,2-Dichloroethane Use-1,2-Dichloroethane Carbon Disulfide Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane	Location ID:	MW-16 10/08/20 1.0 U 0.63 J 1.0 U 1.0 U 1.0 U 1.0 U 2.6 4.2 2.4 NA MW-18 05/02/11	MW-16 9/14/2021 1.0 U 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ NA 1.0 UJ 1.0	MW-16 09/15/22 1.0 U 1.0	MW-17 10/22/97 10 U 10 U 10 U NA 10 U	MW-17 02/24/98 10 U 10 U 10 U NA 10 U	MW-17 07722/98 2.0 U 2.0 U NA 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 1.0 U	MW-17 12/14/98 2.0 U 2.0 U 2.0 U NA 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U 10/14/15/15 1.0 U 2.8 U 0.90 J	MW-17 04/13/99 0.35 U 0.21 U NA 0.59 U 1.1 U 0.62 U 0.44 U NA 0.71 U 0.56 U MW-18 (14.67) 11/16/15	MW-17 03/16/06 0.30 U 0.30 U 0.50 U 0.50 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U 0.30 U 0.50 U	MW-17 12/07/06 0.20 U 0.30 U 0.40 U	MW-17 05/02/11 1.0 U 1.0 U	MW-18 10/22/97 10 U 10 U NA 10 U	MW-18 02/24/98 10 U 370 D NA 10 U	MW-18 07/22/98 2.0 U 350 D 50 D 50 D 50 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 3.0 U	MW-18 12/14/98 4.0 U 490 D NA 4.0 U 10 U 4.0 U NA 4.0 U 4.0 U NA 4.0 U 4.0 U MW-18 (7.67) 09/20/19	MW-18 04/13/99 1.8 U 740 NA 3.0 U 5.6 U 3.1 U 2.2 U NA 3.6 U 2.8 U WW-18 (7.67) 10/08/20 1.0 U	MW-18 11/16/01 2.0 U 960 NA 1.9 U 1.0 U 2.8 U 3.1 U NA 2.3 U 2.5 U MW-18 (14.67) 10/08/20	MW-18 10/07/02 5.6 U 1,800 NA 5.0 U 18 U 2.4 U NA 5.8 U 2.4 U NA 5.8 U 10.0 U 10.0 U 11.0 U 17 1.8	MW-18 03/03/03 1.4 U 420 220 1.2 U 4.4 U 1.2 U 1.6 U 1.5 U MW-18 (7.57) 9/14/2021 1.0 U 0.82 J 1.0 U	MW-18 10/09/03 6.8 U 2.100 620 3.8 U 16 U 6.2 U 3.6 U 4.8 U 11 U 4.8 U 9/14/2021	MW-18 03/18/04 6.8 U 2.500 NA 3.8 U 16 U 6.2 U 3.6 U NA 11 U 4.8 U MW-18 (24) 09/14/22	MW-18 10/11/04 14 U 3,600 1,200 17 U 46 U 20 U 18 U 18 U 12 U MW-18 (31) 09/15/22 1.0 U 1.0 U	MW-18 03/23/05 5.6 U 3,500 1,400 6.8 U 18 U 7.2 U 8.0 U 7.0 U 5.0 U MW-19D1 08/07/00 0.30 U 24 NA	MW-18 09/23/05 16 U 3,400 1,700 26 U 26 U 22 U 18 U 22 U 17 U MW-19D1 12/19/01 1.0 U 390 NA	MW-18 03/16/06 6.6 U 3.600 NA 10 U 10 U 7.4 U NA 5.6 U MW-19D1 10/07/02	MW-18 06/08/06 8.2 U 4.800 1,400 13 U 13 U 11 U 9.2 U 11 U 8.5 U MW-19D1 03/03/03	MW-18 06/22/06 8.2 U 4.600 2.000 13 U 13 U 11 U 9.2 U 11 U 9.5 U 11 U 09.000 0.50 U	MW-18 01/03/08 2.2 U 92/0 380 2.0 U 4.0 U 4.2 U 3.6 U 2.8 U 3.8 4.4 U MW-19D1 03/18/04	MW-18 01/03/08 2.2 U 1,400 590 2.0 U 4.0 U 4.2 U 3.6 U 2.8 U 7.4 4.4 U MW-19D1 0.50 190 0.40 U
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane Chlorotorm Methylene Chloride Tetrachloroethane Trichloroethane Trichloroethane cis-1,2-Dichloroethane cis-1,2-Dichloroethane Unity Chloride Carbon Disulfide Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane Chloroethane Chloroethane Chloroethane Chloroethane	Location ID:	MW-16 10/08/20 0.63 J 1.0 U 1.0 U 1.0 U 2.6 4.2 2.4 NA MW-18 05/02/11 30 U 7/10 160 30 U	MW-16 9/14/2021 1.0 U 1.	MW-16 09/15/22 1.0 U	MW-17 10/22/97 10 U 10 U 10 U NA 10 U 10 U 10 U 10 U 10 U 10 U NA 10 U	MW-17 02/24/98 10 U 10 U 10 U 10 U 10 U 10 U 10 U 10 U	MW-17 07/22/98 2.0 U 2.0 U NA 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 3.0 U 2.0 U 4.67 06/04/15 16 16 1.0 U	MW-17 12/14/98 2.0 U 2.0 U NA 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 1.0 U 2.0 U 1.0 U 2.0 U 1.1 (6/15) 1.0 U 2.8 U 2.8 U 1.0 U	MW-17 04/13/99 0.35 U 0.21 U NA 0.59 U 1.1, U 0.62 U 0.44 U NA 0.71 U 0.56 U MW-18 (14.67) 11/16/15 2.0 U 210 26 U 20 U	MW-17 03/16/06 0.30 U 0.30 U 0.30 U NA 0.50 U 0.50 U 0.40 U NA 0.30 U 0.40 U NA 0.30 U 0.40 U NA 0.30 U 0.40 U 15 NA 1.0 U	MW-17 12/07/06 12/07/06 0.20 U 0.30 U 0.40 U 0.20 U 0.40 U 0.40 U 0.40 U 0.30 U 0.20 U 0.40 U 0.30 U 0.20 U 0.40 U 0.40 U 0.30 U 0.20 U 0.40 U	MW-17 05/02/11 1.0 U 1.0	MW-18 10/22/97 10 U 10 U NA 10 U	MW-18 02/24/98 10 U 370 D NA 10 U	MW-18 07/22/98 2.0 U 350 D NA 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U 1.0 U 4.9 1.0 U 1.0 U	MW-18 12/14/98 4.0 U 490 D NA 4.0 U 4.0 U 4.0 U NA 4.0 U 4.0 U 9/20/19 1.0 U 19 2.3	MW-18 04/13/99 1.8 U 740 NA 3.0 U 5.6 U 2.2 U NA 3.6 U 2.8 U 10/08/20 1.0 U 5.1 1.0 U 1.0 U	MW-18 11/16/01 2.0 U 960 NA 1.9 U 10 U 2.8 U NA 2.3 I U NA 2.3 I U NA 2.5 U MW-18 (14.67) 10/08/20 1.0 U 4.3 1.0 U	MW-18 10/07/02 5.6 U 1,800 NA 5.0 U 18 U 4.8 U 2.4 U NA 5.8 U 6.0 U 09/20/19 09/20/19 17 1.8	MW-18 03/03/03 1.4 U 420 220 1.2 U 4.4 U 1.2 U 0.60 U 1.4 U 1.5 U MW-18 (7.57) 9/14/2021 1.0 U 0.82 J 1.0 U	MW-18 10/09/03 6.8 U 2,100 620 3.8 U 16 U 6.2 U 3.6 U 4.8 U 11 U 4.8 U 9/14/2021 1.0 U 1.1 U 1.0 U	MW-18 03/18/04 2.500 NA 3.8 U 2.500 NA 11 U 4.8 U 99/14/22 1.0 U 1.0 U 1.0 U	MW-18 10/11/04 14 U 3,600 1,200 17 U 46 U 18 U 20 U 18 U 12 U 10/16/20 10/16/20 1.0 U 1.0 U 1.0 U	MW-18 03/23/05 5.6 U 3.500 1.400 6.8 U 7.2 U 8.0 U 7.0 U 5.0 U MW-19D1 08/07/00 0.30 U 24 NA 0.20 U	MW-18 09/23/05 16 U 3.400 1.700 26 U 26 U 22 U 18 U 22 U 14 U 17 U MW-19D1 1.0 U 390 NA 1.0 U	MW-18 03/16/06 6.6 U 3.600 NA 10 U 10 U 9.0 U 7.4 U NA 5.6 U 100/702 0.80 U 230 NA 0.50 U 0.80 U	MW-18 06/08/06 8.2 U 4,800 1,400 13 U 13 U 11 U 9.2 U 11 U 14 8.5 U MW-19D1 03/03/03 1.4 U 280 2.4 U	MW-18 06/22/06 8.2.U 4.6000 2.000 13.U 13.U 11.U 9.2.U 11.U 11.U 11.U 11.U 11.U 11.U 11.U	MW-18 01/03/08 2.2 U 920 360 2.0 U 4.0 U 4.2 U 3.6 U 2.8 U 3.8 4.4 U MW-19D1 03/18/04 0.40 170 NA	MW-18 01/03/08 1,400 590 2.0 U 4.0 U 4.2 U 3.6 U 2.8 U 7.4 4.4 U MW-19D1 0.50 190 0.40 U
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chloroethane Chloroform Methylene Chloride Tetrachloroethane Trichloroethane Dis-1,2-Dichloroethane User-1,2-Dichloroethane Carbon Disulfide Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chloroform Methylene Chloride	Location ID:	MW-16 10/08/20 1.0 U 0.63 J 1.0 U 1.0 U 1.0 U 1.0 U 2.6 4.2 2.4 NA MW-18 05/02/11 30 U 710 160 30 U 14 J	MW-18 914/2021 1.0 U 1.0	MW-16 09/15/22 1.0 U	MW-17 10/22/97 10 U 10 U 10 U 10 U 10 U 10 U 10 U 10 U	MW-47 02/24/98 10 U	MW-17 07722/98 2.0 U 2.0 U 2.0 U 5.0 U 5.0 U 2.0 U 2.0 U 2.0 U 3.0 U 3.	MW-17 12/14/98 2.0 U 2.0 U 2.0 U NA 2.0 U 1.0 U 2.0 U 2.0 U 1.0 U 1.0 U 2.0 U 1.0 U 2.8 U 1.0 U 1.0 U	MW-17 04/13/99 0.35 U 0.21 U NA 0.59 U 1.1 U 0.62 U 0.44 U NA 0.71 U 0.56 U MW-18 (14.67) 11/16/15 2.0 U 210 16 2.0 U 2.0 U	MW-17 03/16/06 0.30 U 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.50 U	MW-17 12/07/06 0.20 U 0.30 U 0.30 U 0.40 U 0.50 U 0.50 U 0.50 U 12 NA 1.0 U 1.0 U	MW-17 05/02/11 1.0 U	MW-18 10/2297 10 U	MW-18 022498 10 U 370 D NA 10 U	MW-18 0772298 2.0 U 350 D NA 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 4.9 1.0 U 4.9 1.0 U 1.0 U	MW-18 12/14/98 4.0 U 490 D NA 4.0 U 10 U 4.0 U 4.0 U NA 4.0 U MW-18 (7.67) 09/20/19 1.0 U 19 2.3 1.0 U	MW-18 04/13/99 1.8 U 740 NA 3.0 U 5.6 U 2.2 U NA 3.6 U 2.8 U 2.8 U 10/08/20 1.0 U 5.1 U 1.0 U 5.1 U 1.0 U 1.0 U	MW-18 11/16/01 2.0 U 980 NA 1.9 U 110 U 2.8 U 3.1 U NA 2.3 U 2.5 U 10/08/20 1.0 U 4.3 1.0 U	MW-18 1007/02 5.6 U 1,000 NA 5.0 U 18 U 2.4 U NA 5.8 U 0.0 U 10 U 10 U 17 1.0 U 17 1.0 U	MW-18 03/03/03 1.4 U 420 220 1.2 U 4.4 U 1.6 U 1.6 U 1.5 U MW-18 (7.67) 9/14/2021 1.0 U 0.862 J 1.0 U 1.0 U 1.0 U	MW-18 10/09/03 6.8 U 2,100 6.20 6.20 3.8 U 6.2 U 6.2 U 6.2 U 4.8 U 4.8 U 4.1 U 4.1 U 1.0 U 1.0 U 1.0 U 1.0 U	MW-18 03/18/04 6.8 U 2.500 NA 3.8 U 16 U 6.2 U 3.6 U NA 11 U 4.8 U 99/14/22 1.0 U 1.0 U 1.0 U 1.0 U	MW-18 10/11/04 14 U 3,600 1,200 17 U 46 U 18 U 18 U 12 U 10 MW-18 (31) 09/15/22 1.0 U 1.0 U 1.0 U 1.0 U	MW-18 03/23/05 5.6 U 3.500 1.400 6.8 U 18 U 7.2 U 6.0 U 7.0 U 5.0 U 7.0 U 0.30 U 24 NA 0.20 U 0.80 U	MW-18 09/23/05 16 U 3.400 1.700 28 U 28 U 28 U 18 U 22 U 14 U 17 U 17 U 0 0 0 10 U 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	MW-18 03/16/06 6.6 U 3.600 NA 10 U 9.0 U 7.4 U NA 5.6 U 0.60 U 230 NA 10 U 10 U 11 U 11 U 12 U 13 U 14 U 15 U 15 U 16 U 17 U 17 U 18 U 18 U 18 U 18 U 18 U	MW-18 06/08/06 8.2 U 4.800 11.400 13.U 13.U 11.U 11.U 14.0 8.5 U 11.U 14.U 10.0 10.0 10.0 10.0 10.0 10.0 10.0 10	MW-18 06/22/06 8.2 U 4.600 2.600 2.000 13 U 13 U 11 U 13 U 13 U 13 U 13 U 13 U 13 U 13 U 14 U 15 U 16 O 17 U 17 U 18 S. U 18 S. U 18 S. U 19 S. U 10 O 10	MW-18 01/03/08 2.2 U 920 380 2.0 U 4.0 U 4.2 U 3.6 U 3.8 U 3	MW-18 01/03/08 2.2 U 1.400 5.50 2.0 U 4.0 U 4.2 U 3.6 U 2.8 U 7.4 4.4 U 10/12/04 0.50 190 0.40 U 0.30 U 0.30 U
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane Chlorotorm Methylene Chloride Tetrachloroethane Cis-1,2-Dichloroethane cis-1,2-Dichloroethane cis-1,2-Dichloroethane Carbon Disulfide Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane Chloroethane Chloroethane Chloroethane Chloroethane Chloroethane Chloroethane Tetrachloroethane Methylene Chloride Tetrachloroethane	Location ID:	MW-16 10/08/20 1.0 U 0.63 J 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 2.6 4.2 2.4 NA MW-18 05/02/11 710 160 30 U 14 J 30 U	MW-16 9/14/2021 1.0 U 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ NA 1.0 UJ 1.0 U NA	MW-16 09/15/22 1.0 U	MW-17 10/22/97 10 U 10 U 10 U NA 10 U 10 U 10 U 10 U 10 U NA 10 U	MW-17 02/24/98 10 U 10 U 10 U NA 10 U 10 U 10 U NA 10 U	MW-17 07/22/88 2.0 U 2.0 U 2.0 U NA 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 4.0 U 4.0 U 4.0 U 4.1 U	MW-17 12/14/98 2.0 U 2.0 U NA 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 1.0 U 2.0 U 1.1 (6/15) 1.0 U 2.8 0 0.90 J 1.0 U 1.0 U	MW-17 04/13/99 0.35 U 0.21 U NA 0.59 U 1.1 U 0.62 U 0.44 U NA 0.71 U 0.56 U MW-18 (14.67) 11/16/15 2.0 U 210 16 2.0 U 2.0 U 2.0 U	MW-17 03/16/06 0.30 U 0.30 U 0.30 U NA 0.50 U 0.40 U NA 0.50 U 0.40 U NA 0.30 U NA 0.30 U NA 0.30 U 0.40 U NA 0.30 U	MW-17 12/07/06 0.20 U 0.30 U 0.30 U 0.40 U 0.20 U 0.40 U 0.50 U 0.50 U 0.50 U 0.50 U 0.50 U	MW-17 05/02/11 1.0 U	MW-18 10/2297 10 U	MW-18 02/24/98 10 U 370 D NA 10 U	MW-18 0772298 2.0 U 350 D NA 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 4.0 U 4.9 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	MW-18 12/14/98 4.0 U 490 D NA 4.0 U 10 U 4.0 U 4.0 U 4.0 U 4.0 U 4.0 U MW-18 (7.67) 09/20/19 1.0 U 1.0 U 1.0 U 1.0 U	MW-18 04/13/99 1.8 U 740 NA 3.0 U 5.6 U 3.1 U 2.2 U NA 3.6 U 2.8 U MW-18 (7.67) 10/08/20 1.0 U 1.0 U 1.0 U 1.0 U	MW-18 11/16/01 2.0 U 960 NA 1.9 U 10 U 2.8 U 3.1 U NA 2.3 U 2.5 U MW-18 (14.67) 10/08/20 1.0 U 4.3 1.0 U 1.0 U	MW-18 10/07/02 5.6 U 1.800 NA 5.0 U 18 U 4.8 U 2.4 U NA 5.0 U MW-18 (14.67) 09/20/19 1.0 U 17 1.8 1.0 U NA	MW-18 03/03/03 1.4 U 420 220 1.2 U 4.4 U 1.2 U 1.5 U 1.5 U MW-18 (7.67) 9/14/2021 1.0 U 0.82 U 1.0 U 1.0 U 1.0 U 1.0 U NA	MW-18 1009/03 6.8 U 2,100 620 3.8 U 62 U 4.8 U 11 U 4.8 U MW-18 (14.67) 9/14/2021 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	MW-18 03/18/04 6.8 U 2.500 NA 3.8 U 16 U 6.2 U 3.6 U NA 11 U 4.8 U MW-18 (24) 09/14/22 1.0 U	MW-18 10/11/04 14 U 3.600 1,200 17 U 46 U 18 U 20 U 18 U 12 U MW-18 (31) 09/15/22 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	MW-18 03/23/05 5.6 U 3.500 1,400 6.8 U 18 U 7.2 U 8.0 U 7.0 U 7.0 U 5.0 U MW-19D1 08/07/00 0.30 U 24 NA 0.20 U 0.80 U 0.80 U 0.30 U	MW-18 09/23/05 16 U 3,400 1,700 26 U 26 U 22 U 11 U 17 U 17 U 10	MW-18 03/16/06 6.6 U 3.000 NA 10 U 10 U 9.0 U 7.4 U NA 5.6 U 6.8 U MW-19D1 10/07/02 0.60 U 230 NA 0.50 U 1.8 U 0.50 U 1.8 U	MW-18 06/08/06 8.2 U 4.800 1.400 13 U 13 U 11 U 9.2 U 14 8.5 U MW-19D1 03/03/03 1.4 U 280 24 U 44 U 12 U	MW-18 06/22/06 8.2 U 4.6000 13.U 13.U 11.U 11.U 11.U 11.U 11.U 11.U	MW-18 01/03/08 22 U 920 320 22 U 42 U 42 U 3.8 4.4 U MW-19D1 0.03/18/04 0.40 170 NA 0.20 U 0.80 U 0.80 U	MW-18 01/03/08 2.2 U 1,400 590 2.0 U 4.0 U 4.2 U 3.6 U 2.8 U 7.4 4.4 U MW-19D1 10/12/04 0.50 190 0.40 U 0.90 U 0.90 U
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chloroethane Chlorotorm Methylene Chloride Tetrachloroethane Cist-1,2-Dichloroethane Cist-1,2-Dichloroethane Cist-1,2-Dichloroethane Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chloroform Methylene Chloride Tetrachloroethane Tetrachloroethane Trichloroethane	Location ID:	MW-16 10/08/20 1.0 U 0.63 J 1.0 U 1.	MW-16 9/14/2021 1.0 U 1.	MW-16 09/15/22 1.0 U 1.0	MW-17 10/22/97 10 U	MW-17 02/24/98 10 U	MW-17 07/22/88 2.0 U 2.0 U 2.0 U NA 2.0 U 2.0 U NA 2.0 U 2.0 U NA 2.0 U 1.0 U	MW-17 12/14/98 2.0 U 2.0 U 2.0 U NA 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 1.0 U 2.0 U 2.0 U 1.0 U	MW-17 04/13/99 0.35 U 0.21 U NA 0.59 U 1.1 U 0.62 U 0.44 U NA 0.71 U 0.56 U MW-18 (14.67) 11/16/15 2.0 U 210 16 2.0 U 2.0 U 2.0 U	MW-17 03/16/06 0.30 U 0.30 U 0.30 U 0.30 U NA 0.50 U 0.40 U NA 0.50 U 0.40 U NA 0.50 U NA 0.50 U NA 0.50 U 0.40 U NA 0.50 U 1.0 U 1.0 U 1.0 U NA	MW-17 12/07/06 0.20 U 0.30 U 0.30 U 0.40 U 0.20 U 0.40 U 0.20 U 0.40 U 0	MW-17 05/02/11 1.0 U	MW-18 10/2297 10 U	MW-18 02/24/98 10 U 370 D NA 10 U	MW-18 07/22/98 2.0 U 350 D NA 2.0 U 5.0 U 5.0 U 2.0 U 2.0 U 11/20/18 11/20/18 11/20/18 1.0 U	MW-18 12/14/98 4.0 U 490 D NA 4.0 U 10 U 4.0 U 4.0 U 4.0 U 4.0 U 4.0 U 1.0 U 4.0 U 1.0 U	MW-18 04/13/99 1.8 U 740 NA 3.0 U 5.6 U 3.1 U 2.2 U NA 0.0 1.0 U	MW-18 11/16/01 2.0 U 960 NA 1.9 U 10 U 2.8 U 3.1 U NA 2.3 U 2.5 U MW-18 (14.67) 1.0 U 4.3 1.0 U	MW-18 10/07/02 5.6 U 1.000 / 0	MW-18 03/03/03 1.4 U 420 220 1.2 U 4.4 U 1.2 U 1.6 U 1.6 U 1.6 U 1.7 U 1.0 U	MW-18 10/09/03 6.8 U 2,100 6.8 U 2,100 6.20 3.8 U 6.2 U 6.2 U 6.2 U 4.8 U 11 U 4.8 U 11 U 1.0 U 1.1 1.0 U 1.0 U NA 1.0 U	MW-18 03/18/04 6.8 U 2.500 NA 3.8 U 16 U 6.2 U 3.6 U NA 11 U 4.8 U 10 U 1.0 U	MW-18 10/11/04 14 U 3,600 1,200 17 U 46 U 18 U 20 U 18 U 12 U 18 U 10 U	MW-18 03/23/05 5.6 U 3.500 1.400 6.8 U 18 U 7.2 U 8.0 U 7.0 U 7.0 U 7.0 U 24 NA 0.20 U 0.30 U 0.30 U 0.40 U NA	MW-18 09/23/05 16 U 3.400 1.700 2e U 2e U 2e U 18 U 22 U 14 U 17 U 17 U 0 00 10 U 10 U	MW-18 03/16/06 6.6 U 3.600 NA 10 U 10 U 9.0 U 7.4 U NA 10 U 0.60 U 230 NA 10 U 10 U 0.50 U 10 U 0.50 U	MW-18 0608/06 8.2 U 4.800 1.800 13.U 13.U 11.U 92.U 11.U 92.U 14.4 8.5 U 12.U 12.U 12.U 12.U 12.U 14.U 14.U 14.U 15.U 16.U 17.U 18.U 18.U 18.U 18.U 18.U 18.U 18.U 18	MW-18 06/22/06 8.2 U 4.6000 2.000 13 U 13 U 11 U 11 U 9.2 U 11 U 8.5 U 120 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U	MW-18 01/03/08 2.2 U 920 360 2.0 U 4.0 U 4.2 U 3.6 U 3	MW-18 01/03/08 2.2 U 1,400 590 2.0 U 4.0 U 4.2 U 3.6 U 2.8 U 7.4 4.4 U 0.50 190 0.30 U 0.30 U 0.90 U 0.40 U 0.40 U
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chlorotorm Methylene Chloride Tetrachloroethane Cis-1,2-Dichloroethene Cis-1,2-Dichloroethene Cis-1,2-Dichloroethene Unityl Chloride Carbon Disulfide Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane Chloroethane Chloroethane Chloroethane Trichloroethane Trichloroethene Trichloroethene Trichloroethene	Location ID:	MW-16 10/08/20 1.0 U 0.83 J 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 2.6 4.2 2.4 NA MW-18 05/02/11 30 U 710 160 30 U 14 J 30 U 30 U 30 U 30 U	MW-16 9/14/2021 1.0 U 1.0 UJ 1.0 U NA MW-18 05/02/11 30 U 30 U 170 30 U 30 U 30 U 30 U 30 U	MW-16 09/15/22 1.0 U 1.0	MW-17 10/22/97 10 U 10 U 10 U NA 10 U	MW-17 02/24/98 10 U 10 U 10 U NA 10 U	MW-17 07/22/88 2.0 U 2.0 U NA 2.0 U 1.0 U 16 1.0 U 1.0	MW-17 12/14/98 2.0 U 2.0 U 2.0 U NA 2.0 U 2.0 U 2.0 U 2.0 U 1.0 U 2.0 U 1.1 (6/15) 1.0 U 2.0 U 1.0 U	MW-17 04/13/99 0.35 U 0.21 U NA 0.59 U 1.1 U 0.62 U 0.44 U NA 0.71 U 0.56 U MW-18 (14.67) 11/6/15 2.0 U	MW-17 03/16/06 0.30 U 0.30 U 0.30 U NA 0.50 U 0.40 U NA 0.30 U NA 0.30 U NA 0.30 U NA 0.30 U 0.40 U NA 0.30 U 0.30	MW-17 12/07/06 0.20 U 0.30 U 0.30 U 0.40 U 0.20 U 0.40 U 0.50 U 0.50 U 12 NA 1.0 U 1.0 U 1.0 U NA	MW-17 05/02/11 1.0 U	MW-18 10/2297 10 U 10 U 10 U NA 10 U	MW-18 02/24/98 10 U 370 D NA 10 U	MW-18 0772298 2.0 U 350 D NA 2.0 U 5.0 U 2.0 U 2.0 U 2.0 U 2.0 U 2.0 U 4.9 11/20/18 1.0 U 4.9 1.0 U	MW-18 12/14/98 4.0 U 490 D NA 4.0 U 1.0 U 4.0 U 1.0 U	MW-18 04/13/99 1.8 U 740 NA 3.0 U 5.6 U 3.1 U 2.8 U NA 3.6 U 2.8 U MW-18 (7.67) 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	MW-18 11/16/01 2.0 U 960 NA 1.9 U 10 U 2.8 U 3.1 U NA 2.3 U 2.5 U MW-18 (14.67) 10/02/20 1.0 U 4.3 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	MW-18 10/07/02 5.6 U 1.800 NA 5.0 U 18 U 4.8 U 2.4 U NA 5.0 U 18 U 1.0 U 17 1.0 U 17 1.0 U	MW-18 03/03/03 1.4 U 420 220 1.2 U 4.4 U 1.2 U 1.5 U 1.5 U MW-18 (7.67) 9/14/2021 1.0 U 0.82 U 1.0 U 1.0 U 1.0 U NA 1.0 U NA	MW-18 1009/03 6.8 U 2,100 620 3.8 U 62 U 4.8 U 11 U 4.8 U MW-18 (14.67) 9/14/2021 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U	MW-18 03/18/04 6.8 U 2.500 NA 3.8 U 16 U 6.2 U 3.6 U NA 11 U 4.8 U MW-18 (24) 09/14/22 1.0 U	MW-18 10/11/04 14 U 3.600 1,200 17 U 46 U 18 U 20 U 18 U 12 U MW-18 (31) 09/15/22 1.0 U	MW-18 03/23/05 5.6 U 3.500 1,400 6.8 U 18 U 7.2 U 8.0 U 7.0 U 7.0 U 5.0 U MW-19D1 08/07/00 0.30 U 24 NA 0.20 U 0.80 U 0.30 U 0.40 U NA	MW-18 09/23/05 16 U 3,400 1,700 26 U 26 U 22 U 11 U 17 U 17 U 10	MW-18 03/16/06 6.6 U 3.000 NA 10 U 9.0 U 7.4 U NA 5.6 U 6.8 U MW-19D1 10/07/02 M 10 U 10 U 10 U NA 10 U 10 U NA 10 U 10 U NA NA NA NA NA	MW-18 06/08/06 8 2 U 4 800 1 400 1 3 U 13 U 11 U 11 U 9 2 U 14 8 5 U MW-19D1 03/03/03 1 4 U 280 24 U 4 4 U 1 2 U 1 4 U 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	MW-18 06/22/06 8.2 U 4.6000 13 U 13 U 11 U 11 U 11 U 11 U 11 U 10/09/03 0.30 U 120 0.50 U 0.80 U 0.80 U 0.60	MW-18 01/03/08 22 U 920 360 360 2 D U 4 2 U 4 2 U 3 3 8 4 4 U MW-19D1 03/18/04 0.40 170 NA 0.60 U 0.80 U 0.80 U 0.80 U	MW-18 01/03/08 2.2 U 1,400 590 2.0 U 4.0 U 4.2 U 3.2 U 4.4 U 2.8 U 7.4 4.4 U MW-19D1 10/12/04 0.50 190 0.40 U 0.90 U 0.90 U



| | | Location ID: | MW-19D1 | MW-19D1 | MW-19D1 | MW-19D1 | MW-19D1 | MW-19D1 | MW-19D1
 | MW-19D1 | MW-19D1 | MW-19D1 | MW-19D1 | MW-19D1
 | MW-19D1 | MW-19D1 | MW-19D1 | MW-19D2 | MW-19D2 | MW-19D2
 | MW-19D2 | MW-19D2 | MW-19D2 | MW-19D2
 | MW-19D2 | MW-19D2 | MW-19D2 | MW-19D2
 | MW-20D | MW-20D1 | MW-20D1
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		Sample Date:
 | 11/16/15 | 10/05/16 | 10/03/17 | 11/20/18 | 09/20/19
 | 10/08/20 | 10/29/21 | 09/15/22 | 08/07/00 | 12/19/01 | 10/07/02
 | 03/03/03 | 10/09/03 | 03/18/04 | 10/12/04
 | 03/23/05 | 09/23/05 | 03/16/06 | 06/22/06
 | 08/07/00 | 11/19/01 | 12/19/01
 | 05/28/02 |
| Volatile Organics | CAO Goal ¹ | Units | 03/23/03 | 09/23/03 | 03/16/06 | 06/22/06 | 03/02/11 | 11/21/14 | 06/04/13
 | 11/16/13 | 10/03/16 | 10/03/17 | 11/20/16 | 09/20/19
 | 10/06/20 | 10/29/21 | 09/13/22 | 08/07/00 | 12/19/01 | 10/07/02
 | 03/03/03 | 10/09/03 | 03/16/04 | 10/12/04
 | 03/23/03 | 09/23/03 | 03/16/06 | 00/22/06
 | 06/07/00 | 11/19/01 | 12/19/01
 | 03/28/02 |
| 1,1,2-Trichloroethane | CAO Goal | ug/L | 0.30 U | 0.30 U | 0.30 U | 0.30 U | 4.0 U | 1.0 U | 1011
 | 1.0 U | 5.0 U | 1011 | 1.0 U | 1.0 U
 | 1.0 U | 1.0 U | 1.0 U | 0.30 U | 0.20 U | 0.30 U
 | 0.30 U | 0.30 U | 0.30 U | 0.30 U
 | 0.30 U | 0.30 U | 0.30 U | 0.2011
 | 0.30 U | 0.20 U | 0.20 U
 | 0.2011 |
| 1,2-Thchloroethane | 5 | ug/L | 200 | 120 | 0.30 0 | 84 | 62 | 3.0 | 1.6
 | 1.9 | 7.8 | 2.8 | 26 | 20
 | 31 | 30 | 52 D | 4.7 | 3.0 | 0.90
 | 0.40 U | 0.80 | 0.90 | 0.40 U
 | 0.80 | 1.0 | 0.60 | 0.60
 | 0.20 U | 0.20 U | 4.1
 | 2.7 |
| Chloroethane | | ug/L | 0.40 U | 0.20 U | NA
NA | 0.20 U | 4.0 U | 1.0 U | 1.0 U
 | 1.0 U | NA | 1.0 U | 1.0 U | 1.0 U
 | 1.0 U | 1.0 U | 1.0 U | NA NA | NA | NA
 | 0.50 U | 0.50 U | NA | 0.40 U
 | 0.40 U | 0.20 U | NA | 0.20 U
 | NA | NA
NA | NA.
 | NA NA |
| Chloroform | 0.19 | ug/L | 0.30 U | 0.50 U | 0.50 U | 0.50 U | 4.0 U | 1.0 U | 1.0 U
 | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U
 | 1.0 U | 1.0 U | 1.0 U | 0.20 U | 0.20 U | 0.20 U
 | 0.20 U | 0.20 U | 0.20 U | 0.30 U
 | 0.30 U | 0.50 U | 0.50 U | 0.50 U
 | 9.1 | 0.20 U | 0.20 U
 | 0.20 U |
| Methylene Chloride | 5 | ug/L | 0.90 U | 0.50 U | 0.50 U | 0.50 U | 2.5 JB | 1.0 U | 1.0 U
 | 1.0 U | 5.0 U | 1.0 U | 1.0 U | 1.0 U
 | 1.0 U | 1.0 U | 1.0 U | 0.80 U | 1.0 U | 0.90 U
 | 0.90 U | 0.80 U | 0.80 U | 0.90 U
 | 0.90 U | 0.50 U | 0.50 U | 0.50 U
 | 0.80 U | 1.0 U | 1.0 U
 | 0.90 U |
| Tetrachloroethene | 5 | ug/L | 0.40 U | 0.40 U | 0.40 U | 0.40 U | 4.0 U | 1.0 U | 1.0 U
 | 1.0 U | 1.0 U | NA | 1.0 U | NA
 | 1.0 U | NA | 1.0 U | 0.30 U | 0.30 U | 0.20 U
 | 0.20 U | 0.30 U | 0.30 U | 0.40 U
 | 0.40 U | 1.0 | 0.40 U | 0.40 U
 | 0.30 U | 0.30 U | 0.30 U
 | 0.20 U |
| Trichloroethene | 5 | ug/L | 0.90 | 1.0 | 0.80 | 0.70 | 4.0 U | 0.39 J | 0.35 J
 | 0.46 J | 1.0 U | 1.0 U | 1.0 U | 1.0 U
 | 1.0 U | 1.0 U | 1.0 U | 0.40 U | 0.30 U | 0.10 U
 | 0.10 U | 0.20 U | 0.20 U | 0.40 U
 | 0.40 U | 0.40 U | 0.40 U | 0.70
 | 0.40 U | 0.30 U | 0.30 U
 | 0.10 U |
| cis-1,2-Dichloroethene | | ug/L | 0.50 | 0.40 U | NA | 0.40 U | 4.0 U | 1.0 U | 1.0 U
 | 1.0 U | NA | 1.0 U | 1.0 U | 1.0 U
 | 1.0 U | 1.0 U | 1.0 U | NA | NA | NA
 | 0.30 U | 0.20 U | NA | 0.40 U
 | 0.40 U | 0.40 U | NA | 0.40 U
 | NA | NA | NA
 | NA |
| Vinyl Chloride | 2 | ug/L | 0.40 U | 0.30 U | 0.30 U | 0.30 U | 4.0 U | 1.0 U | 1.0 U
 | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U
 | 1.0 U | 1.0 U | 1.0 U | 0.60 U | 0.20 U | 0.30 U
 | 0.30 U | 0.50 U | 0.50 U | 0.40 U
 | 0.40 U | 0.30 U | 0.30 U | 0.30 U
 | 0.60 U | 0.20 U | 0.20 U
 | |
| Carbon Disulfide | 1000 | ug/L | 0.20 U | 0.30 U | 0.30 U | 0.30 U | 4.0 U | 1.0 U | 1.0 U
 | 1.0 U | 1.0 U | NA | 1.0 U | NA
 | NA | NA | 1.0 U | 3.2 | 0.20 U | 0.30 U
 | 0.30 U | 0.20 U | 0.20 U | 0.20 U
 | 0.20 U | 0.30 U | 0.30 U | 0.30 U
 | 0.70 U | 0.20 U | 0.20 U
 | 0.30 U |
| | | Location ID: | MW-20D1 | MW-20D1 | MIN 0004 | | ***** | | MW-20D1
 | MW-20D1 | | | 1814 00B4 | |
 | 100 aan 4 | | MW-20D1 | 1814 00D 4 | |
 | MW-20D1 | MW-20D1 | ***** |
 | ***** | | |
 | | MW-20D2 | *****
 | |
| | | | | | MW-20D1 | MW-20D1 | MW-20D1 | MW-20D1 |
 | | MW-20D1 | MW-20D1 | MW-20D1 | MW-20D1
 | MW-20D1 | MW-20D1 | | | MW-20D1 | MW-20D1
 | | | MW-20D1 | MW-20D2
 | MW-20D2 | MW-20D2 | MW-20D2 | MW-20D2
 | MW-20D2 | | MW-20D2
 | MW-20D2 |
| | | Sample Date: | 09/17/02 | 12/18/02 | 03/04/03 | 10/09/03 | 03/18/04 | 10/12/04 | 03/23/05
 | 09/23/05 | 03/16/06 | 06/22/06 | 05/02/11 | 11/21/14
 | 06/04/15 | 11/16/15 | 10/05/16 | 10/03/17 | 11/20/18 | 09/20/19
 | 10/08/20 | 09/15/21 | 09/15/22 | 11/19/01
 | 12/19/01 | 10/07/02 | 03/03/03 | 10/09/03
 | 03/18/04 | 10/12/04 | 03/23/05
 | 09/23/05 |
Volatile Organics	CAO Goal ¹	Units						
 | | | | |
 | | | | | |
 | | | |
 | | | |
 | | |
 | |
| 1,1,2-Trichloroethane | 5 | ug/L | 0.30 U | 0.30 U | 0.30 U | 0.30 U | 0.30 U | 0.30 U | 0.30 U
 | 0.30 U | 0.30 U | | 1.0 U | 1.0 U
 | 1.0 U | 1.0 U | 5.0 U | 1.0 U | 1.0 U | 1.0 U
 | 1.0 U | 1.0 U | 1.0 U | 0.20 U
 | 0.20 U | 0.30 U | 0.30 U | 0.30 U
 | 0.30 U | 0.30 U | 0.30 U
 | |
| 1,2-Dichloroethane | 5 | ug/L | 0.60 | 0.40 U | 0.40 U | 0.50 | 3.3 | 0.40 U | 5.4
 | 2.7 | 2.2 | 1.7 | 2.0 | 1.1
 | 1.2 | 1.0 | 1.1 | 0.89 J | 0.86 J | 0.75 J
 | 0.60 J | 1.0 U | 1.0 U | 0.20 U
 | 0.20 U | 0.40 U | 0.40 U | 0.30 U
 | 0.30 U | 0.40 U | 0.40 U
 | |
| Chloroethane | | ug/L | NA | 0.50 U | 0.50 U | 0.50 U | NA | 0.40 U | 0.40 U
 | 0.20 U | NA | 0.20 U | 1.0 U | 1.0 U
 | 1.0 U | 1.0 U | NA | 1.0 U | 1.0 U | 1.0 U
 | 1.0 U | 1.0 U | 1.0 U | NA
 | NA | NA | 0.50 U | 0.50 U
 | NA | 0.40 U | 0.40 U
 | 0.20 U |
| Chloroform | 0.19 | ug/L | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.30 U | 0.30 U
 | 0.50 U | 0.50 U | | 1.0 U | 0.57 J
 | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U
 | 1.0 U | 1.0 U | 1.0 U | 0.20 U
 | 0.20 U | 0.20 U | 0.20 U | 0.20 U
 | 0.20 U | 0.30 U | 0.30 U
 | |
| Methylene Chloride | 5 | ug/L | 0.90 U | 0.90 U | 0.90 U | 0.80 U | 0.80 U | 0.90 U | 0.90 U
 | 0.50 U | 0.50 U | 0.50 U | 1.0 U | 1.0 U
 | 1.0 U | 1.0 U | 5.0 U | 1.0 U | 1.0 U | 1.0 U
 | 1.0 U | 1.0 U | 1.0 U | 1.0 U
 | 1.0 U | 0.90 U | 0.90 U | 0.80 U
 | 0.80 U | 0.90 U | 0.90 U
 | 0.50 U |
| Tetrachloroethene | 5 | ug/L | 0.20 U | 0.20 U
0.10 U | 0.20 U | 0.30 U | 0.30 U | 0.40 U | 0.40 U
 | 0.40 U | 0.40 U | 0.40 U | 1.0 U | 1.0 U
 | 1.0 U
1.0 U | 1.0 U | 1.0 U | NA
1.0 U | 1.0 U
1.0 U | 1.0 U
 | 1.0 U | 1.0 U | 1.0 U | 0.30 U
0.30 U
 | 0.30 U | 0.20 U
0.10 U | 0.20 U | 0.30 U
 | 0.30 U | 0.40 U | 0.40 U
 | 0.40 U |
| Trichloroethene
cis-1,2-Dichloroethene | 5 | ug/L
ug/L | 0.10 U
NA | 0.10 U | 0.10 U
0.30 U | 0.20 U
0.20 U | 0.20 U
NA | 0.40 U
0.40 U | 0.40 U
0.40 U
 | 0.40 U
0.40 U | 0.40 U
NA | 0.40 U
0.40 U | 1.0 U
1.0 U | 1.0 U
 | 1.0 U | 1.0 U
1.0 U | NA | 1.0 U | 1.0 U | 1.0 U
 | 1.0 U | 1.0 U | 1.0 U | 0.30 U
 | 0.30 U
NA | 0.10 U | 0.10 U
0.30 U | 0.20 U
0.20 U
 | 0.20 U
NA | 0.40 U
0.40 U | 0.40 U
0.40 U
 | 0.40 U
0.40 U |
 | | | | |
 | | | | | |
 | | | |
 | | | |
 | | |
 | |
| Vinyl Chloride | 2 | ug/L | 0.30 U | 0.30 U | 0.30 U | 0.50 U | 0.50 U | 0.40 U | 0.40 U
 | 0.30 U | 0.30 U | 0.30 U | 1.0 U | 1.0 U
 | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U
 | 1.0 U | 1.0 U | 1.0 U | 0.20 U
 | 0.20 U | 0.30 U | 0.30 U | 0.50 U
 | 0.50 U | 0.40 U | 0.40 U
 | 0.30 U |
| Carbon Disulfide | 1000 | ug/L | 0.30 U | | | | | | 0.20 U
 | | | 0.30 U | 0.25 J |
 | | | | | | NA
 | NA NA | NA | 1.0 U |
 | 0.20 U | | |
 | | 0.20 U |
 | 0.30 U |
| Odibon Diodilido | 1000 | ugr | 0.30 0 | 0.30 U | 0.30 U | 0.20 U | 0.20 U | 0.20 U | 0.20 0
 | 0.50 0 | 0.50 0 | 0.30 0 | 0.233 | 1.0 U
 | 1.0 U | 1.0 U | 1.0 U | NA | 1.0 U | 1875
 | 18/5 | 1875 | 1.00 | 0.20 U
 | 0.20 0 | 0.30 U | 0.30 U | 0.20 U
 | 0.20 U | 0.200 | 0.20 0
 | 0.000 |
| Carbon Bibando | | Location ID: | MW-20D2 | MW-20D2 | MW-20S | MW-21 | MW-21 | MW-21 | MW-21
 | MW-21 | MW-21 | MW-21 | MW-21 | MW-21
 | MW-21 | 1.0 U | 1.0 U
MW-21 | MW-22D | MW-22D | MW-22D
 | MW-22D | MW-22D | MW-22D | MW-22D
 | MW-22D | MW-22D | MW-22D | 0.20 U
 | MW-22D | MW-22D | MW-22D
 | MW-22D |
Out of Parameter						1		
 | | | | |
 | | | | | |
 | | | |
 | | | |
 | | |
 | |
| Volatile Organics | | Location ID: | MW-20D2 | MW-20D2 | MW-20S | MW-21 | MW-21 | MW-21 | MW-21
 | MW-21 | MW-21 | MW-21 | MW-21 | MW-21
 | MW-21 | MW-21 | MW-21 | MW-22D | MW-22D | MW-22D
 | MW-22D | MW-22D | MW-22D | MW-22D
 | MW-22D | MW-22D | MW-22D | MW-22D
 | MW-22D | MW-22D | MW-22D
 | MW-22D |
| | \$ | Location ID:
Sample Date: | MW-20D2 | MW-20D2 | MW-20S | MW-21 | MW-21 | MW-21 | MW-21
10/07/02
 | MW-21
03/03/03 | MW-21
10/09/03 | MW-21
03/18/04 | MW-21 | MW-21
 | MW-21
09/22/05 | MW-21 | MW-21 | MW-22D | MW-22D | MW-22D
 | MW-22D
03/04/03 | MW-22D | MW-22D
03/18/04 | MW-22D
10/11/04
 | MW-22D | MW-22D | MW-22D
03/16/06 | MW-22D
 | MW-22D | MW-22D | MW-22D
 | MW-22D
11/16/15 |
| Volatile Organics | \$ | Location ID:
Sample Date:
Units
ug/L | MW-20D2
03/16/06 | MW-20D2
06/22/06 | MW-20S
08/07/00 | MW-21
08/08/00 | MW-21
11/16/01 | MW-21
12/19/01 | MW-21
10/07/02
 | MW-21
03/03/03 | MW-21
10/09/03 | MW-21
03/18/04 | MW-21
10/11/04 | MW-21
03/23/05
 | MW-21
09/22/05 | MW-21
03/16/06 | MW-21
06/22/06 | MW-22D
11/15/01 | MW-22D
12/19/01 | MW-22D
09/17/02
 | MW-22D
03/04/03 | MW-22D
10/09/03 | MW-22D
03/18/04 | MW-22D
10/11/04
 | MW-22D
03/22/05 | MW-22D
09/23/05 | MW-22D
03/16/06 | MW-22D
06/22/06
 | MW-22D
05/03/11 | MW-22D
11/20/14 | MW-22D
06/04/15
 | MW-22D
11/16/15 |
| Volatile Organics
1,1,2-Trichloroethane | CAO Goal ¹ 5 | Location ID:
Sample Date:
Units | MW-20D2
03/16/06 | MW-20D2
06/22/06
0.30 U
0.30 U
0.20 U | MW-20S
08/07/00 | MW-21
08/08/00 | MW-21
11/16/01 | MW-21
12/19/01 | MW-21
10/07/02
0.30 U
0.40 U
NA
 | MW-21
03/03/03 | MW-21
10/09/03 | MW-21
03/18/04
0.30 U | MW-21
10/11/04
0.30 U | MW-21
03/23/05
 | MW-21
09/22/05 | MW-21
03/16/06
0.30 U | MW-21
06/22/06 | MW-22D
11/15/01 | MW-22D
12/19/01
0.20 U | MW-22D
09/17/02
 | MW-22D
03/04/03
0.30 U | MW-22D
10/09/03 | MW-22D
03/18/04
0.30 U | MW-22D
10/11/04
 | MW-22D
03/22/05 | MW-22D
09/23/05 | 03/16/06
03/16/06
0.30 U
1.3
NA | MW-22D
06/22/06
 | MW-22D
05/03/11 | MW-22D
11/20/14
1.0 U
1.0 U
1.0 U | MW-22D
06/04/15
1.0 U
1.0 U
1.0 U
 | MW-22D
11/16/15
1.0 U
1.0 U
1.0 U |
| Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane Chloroethane Chloroform | CAO Goal ¹ 5 5 | Location ID: Sample Date: Units ug/L ug/L | MW-20D2
03/16/06
0.30 U
0.30 U
NA
0.50 U | 06/22/06
06/22/06
0.30 U
0.30 U
0.20 U
0.50 U | MW-20S
08/07/00
0.30 U
13
NA
0.20 U | 0.30 U
0.20 U
NA
0.20 U | MW-21
11/16/01
0.20 U
0.20 U
NA
0.20 U | MW-21
12/19/01
0.20 U
0.20 U
NA
0.20 U | 0.30 U
0.40 U
NA
0.20 U
 | 03/03/03
0.30 U
0.40 U
0.50 U
0.20 U | MW-21
10/09/03
0.30 U
0.30 U | MW-21
03/18/04
0.30 U
0.30 U
NA
0.20 U | MW-21
10/11/04
0.30 U
0.40 U
0.40 U
0.30 U | 03/23/05
03/23/05
0.30 U
0.40 U
0.40 U
0.30 U
 | 09/22/05
09/22/05
0.30 U
0.30 U
0.20 U
0.50 U | MW-21
03/16/06
0.30 U
0.30 U
NA
0.50 U | MW-21
06/22/06
0.30 U
0.30 U
0.20 U
0.50 U | MW-22D
11/15/01
0.20 U
0.20 U
NA
0.20 U | MW-22D
12/19/01
0.20 U
0.20 U
NA
0.20 U | MW-22D
09/17/02
0.30 U
82
NA
0.20 U
 | 03/04/03
03/04/03
0.30 U
0.40 U
0.50 U
0.20 U | MW-22D
10/09/03
0.30 U
0.30 U
0.50 U
0.50 U | 0.30 U
0.30 U
0.30 U
NA
0.20 U | MW-22D
10/11/04
0.30 U
0.40 U
0.40 U
0.30 U
 | MW-22D
03/22/05
0.30 U
0.40 U | MW-22D
09/23/05
0.30 U
0.30 U
0.20 U
0.50 U | 03/16/06
03/16/06
0.30 U
1.3
NA
0.50 U | MW-22D
06/22/06
0.30 U
0.30 U
0.20 U
0.50 U
 | MW-22D
05/03/11
1.0 U
1.0 U
1.0 U
1.0 U | MW-22D
11/20/14
1.0 U
1.0 U
1.0 U
1.0 U | MW-22D
06/04/15
1.0 U
1.0 U
1.0 U
1.0 U
 | 1.0 U
1.0 U
1.0 U
1.0 U
1.0 U |
| Volatile Organics 11,2-Trichioroethane 12-Dichioroethane Chloroethane Chloroform Methylene Chloride | CAO Goal ¹ 5 5 0.19 5 | Location ID: Sample Date: Units ug/L ug/L ug/L ug/L ug/L | MW-20D2
03/16/06
0.30 U
0.30 U
NA
0.50 U
0.50 U | 0.30 U
0.30 U
0.30 U
0.20 U
0.50 U | 0.30 U
13
NA
0.20 U
0.80 U | 0.30 U
0.20 U
NA
0.20 U
0.80 U | MW-21
11/16/01
0.20 U
0.20 U
NA
0.20 U
1.0 U | MW-21
12/19/01
0.20 U
0.20 U
NA
0.20 U
1.0 U | MW-21
10/07/02
0.30 U
0.40 U
NA
0.20 U
0.90 U
 | 03/03/03
0.30 U
0.40 U
0.50 U
0.20 U
0.90 U | MW-21
10/09/03
0.30 U
0.30 U
0.50 U
0.20 U
0.80 U | MW-21
03/18/04
0.30 U
0.30 U
NA
0.20 U
0.80 U | MW-21
10/11/04
0.30 U
0.40 U
0.40 U
0.30 U
0.90 U | 0.30 U
0.40 U
0.40 U
0.40 U
0.90 U
 | MW-21
09/22/05
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U | MW-21
03/16/06
0.30 U
0.30 U
NA
0.50 U
0.50 U | MW-21
06/22/06
0.30 U
0.30 U
0.20 U
0.50 U | MW-22D
11/15/01
0.20 U
0.20 U
NA
0.20 U
1.0 U | MW-22D
12/19/01
0.20 U
0.20 U
NA
0.20 U
1.0 U | 09/17/02
09/17/02
0.30 U
82
NA
0.20 U
0.90 U
 | 0.30 U
0.40 U
0.50 U
0.20 U
0.90 U | MW-22D
10/09/03
0.30 U
0.30 U
0.50 U
0.20 U
0.80 U | 0.30 U
0.30 U
0.30 U
NA
0.20 U
0.80 U | MW-22D
10/11/04
0.30 U
0.40 U
0.40 U
0.30 U
0.90 U
 | MW-22D
03/22/05
0.30 U
0.40 U
0.40 U
0.30 U
0.90 U | 0.30 U
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U | 0.30 U
1.3
NA
0.50 U
0.50 U | MW-22D
06/22/06
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
 | MW-22D
05/03/11
1.0 U
1.0 U
1.0 U
1.0 U | MW-22D
11/20/14
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U | MW-22D
06/04/15
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
 | 1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U |
| Volatile Organics 1.1.2-Trichloroethane 1.2-Dichloroethane Chioroethane Chioroform Methylene Chloride Tetrachloroethene | CAO Goal ¹ 5 | Location ID: Sample Date: Units ug/L ug/L ug/L ug/L | MW-20D2
03/16/06
0.30 U
0.30 U
NA
0.50 U
0.50 U
0.40 U | 0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U | 0.30 U
13
NA
0.20 U
0.80 U
0.30 U | 0.30 U
0.20 U
NA
0.20 U
0.80 U
0.80 U
0.30 U | MW-21
11/16/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U | MW-21
12/19/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U | MW-21
10/07/02
0.30 U
0.40 U
NA
0.20 U
0.90 U
0.20 U
 | MW-21
03/03/03
0.30 U
0.40 U
0.50 U
0.20 U
0.90 U
0.20 U | MW-21
10/09/03
0.30 U
0.30 U
0.50 U
0.20 U
0.80 U
0.30 U | MW-21
03/18/04
0.30 U
0.30 U
NA
0.20 U | MW-21
10/11/04
0.30 U
0.40 U
0.40 U
0.30 U
0.90 U
0.40 U | 0.30 U
0.40 U
0.30 U
0.40 U
0.30 U
0.90 U
0.40 U
 | 09/22/05
0.30 U
0.30 U
0.20 U
0.50 U
0.40 U | 0.30 U
0.30 U
0.30 U
NA
0.50 U
0.50 U
0.40 U | MW-21
06/22/06
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U | MW-22D
11/15/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U | MW-22D
12/19/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U | MW-22D
09/17/02
0.30 U
82
NA
0.20 U
0.90 U
0.20 U
 | 0.30 U
0.40 U
0.50 U
0.50 U
0.90 U
0.20 U | MW-22D
10/09/03
0.30 U
0.30 U
0.50 U
0.50 U
0.80 U
0.30 U | 0.30 U
0.30 U
0.30 U
NA
0.20 U | 0.30 U
0.40 U
0.30 U
0.40 U
0.30 U
0.90 U
0.40 U
 | 03/22/05
0.30 U
0.40 U
0.40 U
0.30 U
0.90 U
0.40 U | MW-22D
09/23/05
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U | 0.30 U
1.3 NA
0.50 U
0.50 U
0.40 U | 0.30 U
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U
 | 1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U | 1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U | MW-22D
06/04/15
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
 | MW-22D
11/16/15
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U |
| Volatile Organics 1.1,2-Trichloroethane 1.2-Dichloroethane Chloroethane Chloroform Methylene Chloride Tetrachloroethene Trichloroethene | CAO Goal ¹ 5 5 0.19 5 5 5 5 5 5 5 5 5 5 | Location ID: Sample Date: Units ug/L ug/L ug/L ug/L ug/L | MW-20D2
03/16/06
0.30 U
0.30 U
NA
0.50 U
0.50 U
0.40 U | 0.30 U
0.30 U
0.30 U
0.30 U
0.50 U
0.50 U
0.50 U
0.40 U | MW-20S
08/07/00
0.30 U
13
NA
0.20 U
0.80 U
0.30 U
0.40 U | MW-21
08/08/00
0.30 U
0.20 U
NA
0.20 U
0.80 U
0.30 U
0.40 U | MW-21
11/16/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U | MW-21
12/19/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U
0.30 U | 0.30 U
0.40 U
NA
0.20 U
0.90 U
0.20 U
0.10 U
 | 0.30 U
0.40 U
0.50 U
0.20 U
0.90 U
0.20 U
0.10 U | MW-21
10/09/03
0.30 U
0.30 U
0.50 U
0.20 U
0.80 U
0.30 U
0.20 U | MW-21
03/18/04
0.30 U
0.30 U
NA
0.20 U
0.80 U
0.30 U | MW-21
10/11/04
0.30 U
0.40 U
0.40 U
0.30 U
0.90 U
0.40 U
0.40 U | 0.30 U
0.40 U
0.40 U
0.30 U
0.40 U
0.30 U
0.90 U
0.40 U
 | 09/22/05
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U
0.40 U | MW-21
03/16/06
0.30 U
0.30 U
NA
0.50 U
0.50 U
0.40 U
0.40 U | MW-21
06/22/06
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U | MW-22D
11/15/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U | MW-22D
12/19/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U
0.30 U | MW-22D
09/17/02
0.30 U
82
NA
0.20 U
0.90 U
0.20 U
0.10 U
 | 0.30 U
0.40 U
0.50 U
0.20 U
0.90 U
0.20 U
0.10 U | MW-22D
10/09/03
0.30 U
0.30 U
0.50 U
0.20 U
0.80 U
0.30 U
0.20 U | 0.30 U
0.30 U
0.30 U
NA
0.20 U
0.80 U
0.30 U | 0.30 U
0.40 U
0.30 U
0.40 U
0.30 U
0.90 U
0.40 U
 | 03/22/05
0.30 U
0.40 U
0.40 U
0.30 U
0.90 U
0.40 U
0.40 U | 0.30 U
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U | 0.30 U
0.30 U
1.3
NA
0.50 U
0.50 U
0.40 U | 0.30 U
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U
 | 1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U | 1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U | MW-22D
06/04/15
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
 | MW-22D
11/16/15
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U |
| Volatile Organics 1.1.2-Trichloroethane 1.2-Dichloroethane Chioroethane Chioroforn Methylene Chloride Tetrachloroethene Trichloroethene Cist-1.2-Dichloroethene | CAO Goal ¹ 5 5 0.19 5 | Location ID:
Sample Date:
Units
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L | MW-20D2
03/16/06
0.30 U
0.30 U
NA
0.50 U
0.50 U
0.40 U
0.40 U
NA | MW-20D2
06/22/06
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U
0.40 U | MW-20S
08/07/00
0.30 U
13
NA
0.20 U
0.80 U
0.30 U
0.40 U
NA | MW-21
08/08/00
0.30 U
0.20 U
NA
0.20 U
0.80 U
0.30 U
0.40 U
NA | MW-21
11/16/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U
0.30 U
NA | MW-21
12/19/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U
0.30 U
NA | 0.30 U
0.40 U
NA
0.20 U
0.90 U
0.20 U
0.10 U
 | 0.30 U
0.40 U
0.50 U
0.50 U
0.90 U
0.20 U
0.20 U
0.30 U | MW-21
10/09/03
0.30 U
0.50 U
0.50 U
0.20 U
0.80 U
0.30 U
0.20 U | MW-21
03/18/04
0.30 U
0.30 U
NA
0.20 U
0.80 U
0.30 U
0.20 U
0.20 U
NA | MW-21
10/11/04
0.30 U
0.40 U
0.40 U
0.30 U
0.90 U
0.40 U
0.40 U
0.40 U | 0.30 U
0.40 U
0.40 U
0.40 U
0.40 U
0.90 U
0.40 U
0.40 U
0.40 U
 | 09/22/05
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U
0.40 U | MW-21
03/16/06
0.30 U
0.30 U
NA
0.50 U
0.50 U
0.40 U
0.40 U
NA | MW-21
06/22/06
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U
0.40 U | MW-22D
11/15/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U
0.30 U
NA | MW-22D
12/19/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U
0.30 U
NA | MW-22D
09/17/02
0.30 U
82
NA
0.20 U
0.90 U
0.20 U
0.10 U
NA
 | 0.30 U
0.40 U
0.50 U
0.20 U
0.20 U
0.20 U
0.20 U
0.30 U | MW-22D
10/09/03
0.30 U
0.30 U
0.50 U
0.20 U
0.80 U
0.30 U
0.20 U
0.20 U | 0.30 U
0.30 U
0.30 U
NA
0.20 U
0.80 U
0.30 U
0.30 U
0.30 U | MW-22D
10/11/04
0.30 U
0.40 U
0.40 U
0.30 U
0.90 U
0.40 U
0.40 U
0.40 U
 | MW-22D
03/22/05
0.30 U
0.40 U
0.40 U
0.30 U
0.90 U
0.40 U
0.40 U
0.40 U | 09/23/05
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U
0.40 U
0.40 U | 0.30 U
1.3
NA
0.50 U
0.50 U
0.40 U
0.40 U
NA | MW-22D
06/22/06
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U
0.40 U
 | 1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U | 1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U | MW-22D
06/04/15
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
 | MW-22D
11/16/15
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U |
| Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chloroethane Chloroform Methylene Chloride Tetrachloroethene Trichloroethene cis-1,2-Dichloroethene Viryl Chloride | CAO Goal ¹ 5 5 5 0.19 5 5 5 2 2 | Location ID:
Sample Date:
Units
ug'L
ug'L
ug'L
ug'L
ug'L
ug'L
ug'L
ug'L | MW-20D2
03/16/06
0.30 U
0.30 U
NA
0.50 U
0.50 U
0.40 U
0.40 U
NA
0.30 U | MW-20D2
06/22/06
0.30 U
0.30 U
0.50 U
0.50 U
0.40 U
0.40 U
0.40 U
0.40 U | MW-20S 08/07/00 0.30 U 13 NA 0.20 U 0.80 U 0.30 U 0.40 U NA 0.60 U | MW-21
08/08/00
0.30 U
0.20 U
NA
0.20 U
0.80 U
0.30 U
0.40 U
NA
0.60 U | MW-21
11/16/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U
0.30 U
NA
0.20 U | MW-21
12/19/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U
0.30 U
NA | 0.30 U
0.40 U
NA
0.20 U
0.90 U
0.90 U
0.10 U
NA
 | 0.30 U
0.40 U
0.50 U
0.20 U
0.20 U
0.20 U
0.10 U
0.30 U
0.30 U | MW-21
10/09/03
0.30 U
0.50 U
0.20 U
0.80 U
0.30 U
0.20 U
0.20 U
0.20 U
0.20 U | MW-21
03/18/04
0.30 U
0.30 U
NA
0.20 U
0.80 U
0.30 U
0.20 U
NA | MW-21
10/11/04
0.30 U
0.40 U
0.30 U
0.30 U
0.90 U
0.40 U
0.40 U
0.40 U
0.40 U | 0.30 U
0.40 U
0.40 U
0.30 U
0.40 U
0.30 U
0.90 U
0.40 U
0.40 U
0.40 U
0.40 U
 | MW-21
09/22/05
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U
0.40 U
0.40 U
0.30 U | MW-21
03/16/06
0.30 U
0.30 U
0.30 U
NA
0.50 U
0.50 U
0.40 U
0.40 U
NA
0.30 U | MW-21
06/22/06
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U
0.40 U
0.40 U | MW-22D
11/15/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U
0.30 U
NA
0.20 U | MW-22D
12/19/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U
0.30 U
NA
0.20 U | MW-22D
09/17/02
0.30 U
82
NA
0.20 U
0.90 U
0.20 U
0.10 U
NA
0.30 U
 | MW-22D
03/04/03
0.30 U
0.40 U
0.50 U
0.20 U
0.20 U
0.10 U
0.30 U
0.30 U | MW-22D
10/09/03
0.30 U
0.30 U
0.50 U
0.20 U
0.30 U
0.30 U
0.20 U
0.20 U
0.20 U | MW-22D
03/18/04
0.30 U
0.30 U
NA
0.20 U
0.80 U
0.30 U
0.20 U
0.50 U | MW-22D
10/11/04
0.30 U
0.40 U
0.40 U
0.30 U
0.90 U
0.40 U
0.40 U
0.40 U
0.40 U
 | MW-22D
03/22/05
0.30 U
0.40 U
0.40 U
0.30 U
0.90 U
0.40 U
0.40 U
0.40 U
0.40 U | MW-22D
09/23/05
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U
0.40 U
0.40 U
0.30 U | MW-22D
03/16/06
0.30 U
1.3
NA
0.50 U
0.50 U
0.40 U
0.40 U
NA
0.30 U | MW-22D
06/22/06
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U
0.40 U
0.40 U
0.30 U
 | MW-22D
05/03/11
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U | MW-22D
11/20/14
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U | MW-22D
06/04/15
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
 | 1.0 U
1.0 U |
| Volatile Organics 1.1.2-Trichloroethane 1.2-Dichloroethane Chioroethane Chioroforn Methylene Chloride Tetrachloroethene Trichloroethene Cist-1.2-Dichloroethene | CAO Goal ¹ 5 5 0.19 5 5 5 5 5 5 5 5 5 5 | Location ID:
Sample Date:
Units
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L
ug/L | MW-20D2
03/16/06
0.30 U
0.30 U
NA
0.50 U
0.50 U
0.40 U
0.40 U
NA | MW-20D2
06/22/06
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U
0.40 U | MW-20S
08/07/00
0.30 U
13
NA
0.20 U
0.80 U
0.30 U
0.40 U
NA | MW-21
08/08/00
0.30 U
0.20 U
NA
0.20 U
0.80 U
0.30 U
0.40 U
NA | MW-21
11/16/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U
0.30 U
NA | MW-21
12/19/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U
0.30 U
NA | 0.30 U
0.40 U
NA
0.20 U
0.90 U
0.20 U
0.10 U
 | 0.30 U
0.40 U
0.50 U
0.50 U
0.90 U
0.20 U
0.20 U
0.30 U | MW-21
10/09/03
0.30 U
0.50 U
0.50 U
0.20 U
0.80 U
0.30 U
0.20 U | MW-21
03/18/04
0.30 U
0.30 U
NA
0.20 U
0.80 U
0.30 U
0.20 U
0.20 U
NA | MW-21
10/11/04
0.30 U
0.40 U
0.40 U
0.30 U
0.90 U
0.40 U
0.40 U
0.40 U | 0.30 U
0.40 U
0.40 U
0.40 U
0.40 U
0.90 U
0.40 U
0.40 U
0.40 U
 | 09/22/05
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U
0.40 U | MW-21
03/16/06
0.30 U
0.30 U
NA
0.50 U
0.50 U
0.40 U
0.40 U
NA | MW-21
06/22/06
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U
0.40 U | MW-22D
11/15/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U
0.30 U
NA | MW-22D
12/19/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U
0.30 U
NA | MW-22D
09/17/02
0.30 U
82
NA
0.20 U
0.90 U
0.20 U
0.10 U
NA
 | 0.30 U
0.40 U
0.50 U
0.20 U
0.20 U
0.20 U
0.20 U
0.30 U | MW-22D
10/09/03
0.30 U
0.30 U
0.50 U
0.20 U
0.80 U
0.30 U
0.20 U
0.20 U | 0.30 U
0.30 U
0.30 U
NA
0.20 U
0.80 U
0.30 U
0.30 U
0.30 U | MW-22D
10/11/04
0.30 U
0.40 U
0.40 U
0.30 U
0.90 U
0.40 U
0.40 U
0.40 U
 | MW-22D
03/22/05
0.30 U
0.40 U
0.40 U
0.30 U
0.90 U
0.40 U
0.40 U
0.40 U | 09/23/05
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U
0.40 U
0.40 U | 0.30 U
1.3
NA
0.50 U
0.50 U
0.40 U
0.40 U
NA | MW-22D
06/22/06
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U
0.40 U
 | 1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U | 1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U | MW-22D
06/04/15
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
 | MW-22D
11/16/15
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U |
| Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane Chloroethane Chloroform Methylene Chloride Tetrachloroethene Trichloroethene Cis-1,2-Dichloroethene Viryl Chloride | CAO Goal ¹ 5 5 5 0.19 5 5 5 2 1000 | Location ID:
Sample Date:
Units
ug'L
ug'L
ug'L
ug'L
ug'L
ug'L
ug'L
ug'L | MW-20D2
03/16/06
0.30 U
0.30 U
NA
0.50 U
0.50 U
0.40 U
0.40 U
NA
0.30 U | MW-20D2 06/22/06 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U | MW-20S 08/07/00 0.30 U 13 NA 0.20 U 0.30 U 0.30 U 0.40 U NA 0.60 U 0.70 U | MW-21
08/08/00
0.30 U
0.20 U
NA
0.20 U
0.80 U
0.30 U
0.40 U
NA
0.60 U
0.70 U | MW-21
11/16/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U
0.30 U
0.30 U
0.20 U | MW-21
12/19/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U
0.30 U
0.30 U
NA
0.20 U
0.30 U | MW-21
10/07/02
0.30 U
0.40 U
NA
0.20 U
0.20 U
0.10 U
NA
0.30 U
0.30 U
 | MW-21
03/03/03
0.30 U
0.40 U
0.50 U
0.20 U
0.90 U
0.20 U
0.10 U
0.30 U
0.30 U | MW-21
10/09/03
0.30 U
0.50 U
0.50 U
0.20 U
0.30 U
0.30 U
0.30 U
0.20 U
0.30 U
0.20 U
0.20 U | MW-21
03/18/04
0.30 U
0.30 U
NA
0.20 U
0.30 U
0.30 U
0.20 U
NA
0.50 U | MW-21
10/11/04
0.30 U
0.40 U
0.40 U
0.30 U
0.90 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U | MW-21
03/23/05
0.30 U
0.40 U
0.40 U
0.30 U
0.30 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
 | MW-21
09/22/05
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U
0.40 U
0.40 U
0.30 U | MW-21
03/16/06
0.30 U
0.30 U
NA
0.50 U
0.40 U
0.40 U
0.40 U
NA
0.30 U | MW-21
06/22/06
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U
0.40 U
0.40 U
0.30 U | MW-22D
11/15/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U
0.30 U
0.30 U
0.20 U
0.20 U | MW-22D
12/19/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U
0.30 U
NA
0.20 U
NA
0.20 U | MW-22D
09/17/02
0.30 U
82
NA
0.20 U
0.90 U
0.20 U
0.10 U
NA
0.30 U
 | MW-22D
03/04/03
0.30 U
0.40 U
0.50 U
0.20 U
0.20 U
0.10 U
0.30 U
0.30 U
0.30 U | MW-22D
10/09/03
0.30 U
0.50 U
0.50 U
0.20 U
0.30 U
0.30 U
0.30 U
0.30 U
0.20 U
0.20 U
0.20 U | MW-22D
03/18/04
0.30 U
0.30 U
NA
0.20 U
0.30 U
0.30 U
0.30 U
0.50 U
0.50 U | MW-22D
10/11/04
0.30 U
0.40 U
0.40 U
0.30 U
0.90 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
 | MW-22D
03/22/05
0.30 U
0.40 U
0.40 U
0.30 U
0.90 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U | MW-22D
09/23/05
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U
0.40 U
0.40 U
0.30 U | MW-22D
03/16/06
0.30 U
1.3
NA
0.50 U
0.40 U
0.40 U
0.40 U
NA
0.30 U | MW-22D
06/22/06
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U
0.40 U
0.40 U
0.30 U
 | MW-22D
05/03/11
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U | MW-22D
11/20/14
1.0 U
1.0 U | MW-22D
06/04/15
1.0 U
1.0 U
 | MW-22D
11/16/15
1.0 U
1.0 U |
| Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane Chloroethane Chloroform Methylene Chloride Tetrachloroethene Trichloroethene Cis-1,2-Dichloroethene Viryl Chloride | CAO Goal 5 5 0.19 5 5 2 1000 | Location ID: Sample Date: Units ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L | MW-20D2 03/16/06 0.30 U 0.30 U NA 0.50 U 0.50 U 0.40 U 0.40 U NA 0.30 U MW-22D | MW-20D2 06/22/06 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U 0.30 U | MW-20S 08/07/00 0.30 U 13 NA 0.20 U 0.90 U 0.30 U 0.40 U NA 0.60 U 0.70 U MW-22D | MW-21 08/08/00 0.30 U 0.20 U NA 0.20 U 0.80 U 0.40 U NA 0.70 U MW-22D | MW-21 11/16/01 0.20 U 0.20 U NA 0.20 U 1.0 U 0.30 U 0.30 U 0.30 U 0.30 U MW-22 U 0.30 U 0.30 U 0.30 U | MW-21
12/19/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U
0.30 U
NA
0.20 U
0.30 U
0.30 U
0.20 U | MW-21
10/07/02
0.30 U
0.40 U
NA
0.20 U
0.90 U
0.20 U
0.10 U
NA
0.30 U
0.30 U
 | MW-21
03/03/03
0.30 U
0.40 U
0.50 U
0.20 U
0.90 U
0.20 U
0.10 U
0.30 U
0.30 U
0.30 U | MW-21
10/09/03
0.30 U
0.30 U
0.50 U
0.20 U
0.80 U
0.30 U
0.20 U
0.20 U
0.50 U
0.20 U | MW-21
03/18/04
0.30 U
0.30 U
NA
0.20 U
0.80 U
0.30 U
0.20 U
NA
0.50 U
0.50 U
0.20 U | MW-21
10/11/04
0.30 U
0.40 U
0.30 U
0.30 U
0.90 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U | MW-21
03/23/05
0.30 U
0.40 U
0.40 U
0.30 U
0.90 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
 | MW-21
09/22/05
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U
0.40 U
0.40 U
0.30 U | MW-21
03/16/06
0.30 U
0.30 U
NA
0.50 U
0.50 U
0.40 U
NA
0.30 U
NA
0.30 U
NA
0.50 U | MW-21 06/22/06 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U | MW-22D 11/15/01 0.20 U 0.20 U NA 0.20 U 1.0 U 0.30 U 0.30 U 0.30 U 0.30 U 0.20 U MM-22S | MW-22D
12/19/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U
NA
0.20 U
0.30 U
NA
0.20 U
0.20 U | MW-22D
09/17/02
0.30 U
82
NA
0.20 U
0.90 U
0.20 U
0.10 U
NA
0.30 U
0.30 U
 | MW-22D 03/04/03 0.30 U 0.40 U 0.50 U 0.20 U 0.90 U 0.90 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U | MW-22D
10/09/03
0.30 U
0.30 U
0.50 U
0.20 U
0.80 U
0.30 U
0.20 U
0.20 U
0.20 U
0.50 U | MW-22D 03/18/04 0.30 U 0.30 U NA 0.20 U 0.80 U 0.80 U 0.50 U NA 0.50 U 0.80 U MW-23 | MW-22D
10/11/04
0.30 U
0.40 U
0.40 U
0.30 U
0.30 U
0.90 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
 | MW-22D
03/22/05
0.30 U
0.40 U
0.40 U
0.30 U
0.90 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U | MW-22D
09/23/05
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U
0.40 U
0.40 U
0.30 U
0.30 U | MW-22D 03/16/06 0.30 U 1.3 NA 0.50 U 0.40 U 0.40 U NA 0.30 U 0.40 U MW-23 | MW-22D 06/22/06 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U
 | MW-22D
05/03/11
1.0 U
1.0 U | MW-22D
11/20/14
1.0 U
1.0 U | MW-22D
06/04/15
1.0 U
1.0 U
 | MW-22D
11/16/15
1.0 U
1.0 U |
| Volatile Organics 1.1.2-Trichloroethane 1.2-Dichloroethane Chloroethane Chloroethane Chloroethane Chloroethane Trichloroethane Trichloroethane Trichloroethane Griver of the Chloroethane Carbon Disullide | \$ CAO Goal ³ 5 5 5 0.19 5 5 5 1 1000 | Location ID: Sample Date: Units ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L | MW-20D2
03/16/06
0.30 U
0.30 U
NA
0.50 U
0.50 U
0.40 U
0.40 U
NA
0.30 U | MW-20D2 06/22/06 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U | MW-20S 08/07/00 0.30 U 13 NA 0.20 U 0.30 U 0.30 U 0.40 U NA 0.60 U 0.70 U | MW-21
08/08/00
0.30 U
0.20 U
NA
0.20 U
0.80 U
0.30 U
0.40 U
NA
0.60 U
0.70 U | MW-21
11/16/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U
0.30 U
0.30 U
0.20 U | MW-21
12/19/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U
0.30 U
0.30 U
NA
0.20 U
0.30 U | MW-21
10/07/02
0.30 U
0.40 U
NA
0.20 U
0.20 U
0.10 U
NA
0.30 U
0.30 U
 | MW-21
03/03/03
0.30 U
0.40 U
0.50 U
0.20 U
0.90 U
0.20 U
0.10 U
0.30 U
0.30 U | MW-21
10/09/03
0.30 U
0.50 U
0.50 U
0.20 U
0.30 U
0.30 U
0.30 U
0.20 U
0.30 U
0.20 U
0.20 U | MW-21
03/18/04
0.30 U
0.30 U
NA
0.20 U
0.30 U
0.30 U
0.20 U
NA
0.50 U | MW-21
10/11/04
0.30 U
0.40 U
0.40 U
0.30 U
0.90 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U | MW-21
03/23/05
0.30 U
0.40 U
0.40 U
0.30 U
0.30 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
 | MW-21
09/22/05
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U
0.40 U
0.40 U
0.30 U | MW-21
03/16/06
0.30 U
0.30 U
NA
0.50 U
0.40 U
0.40 U
0.40 U
NA
0.30 U | MW-21
06/22/06
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U
0.40 U
0.40 U
0.30 U | MW-22D
11/15/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U
0.30 U
0.30 U
0.20 U
0.20 U | MW-22D
12/19/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U
0.30 U
NA
0.20 U
NA
0.20 U | MW-22D
09/17/02
0.30 U
82
NA
0.20 U
0.90 U
0.20 U
0.10 U
NA
0.30 U
 | MW-22D
03/04/03
0.30 U
0.40 U
0.50 U
0.20 U
0.20 U
0.10 U
0.30 U
0.30 U
0.30 U | MW-22D
10/09/03
0.30 U
0.50 U
0.50 U
0.20 U
0.30 U
0.30 U
0.30 U
0.30 U
0.20 U
0.20 U
0.20 U | MW-22D
03/18/04
0.30 U
0.30 U
NA
0.20 U
0.30 U
0.30 U
0.30 U
0.50 U
0.50 U | MW-22D
10/11/04
0.30 U
0.40 U
0.40 U
0.30 U
0.90 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
 | MW-22D
03/22/05
0.30 U
0.40 U
0.40 U
0.30 U
0.90 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U | MW-22D
09/23/05
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U
0.40 U
0.40 U
0.30 U | MW-22D
03/16/06
0.30 U
1.3
NA
0.50 U
0.40 U
0.40 U
0.40 U
NA
0.30 U | MW-22D
06/22/06
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U
0.40 U
0.40 U
0.30 U
 | MW-22D
05/03/11
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U
1.0 U | MW-22D
11/20/14
1.0 U
1.0 U | MW-22D
06/04/15
1.0 U
1.0 U
 | MW-22D
11/16/15
1.0 U
1.0 U |
| Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chloroethane Chloroform Methylene Chloride Tetrachloroethene Gis-1,2-Dichloroethene Cis-1,2-Dichloroethene Carbon Disulfide Volatile Organics | CAO Goal 5 5 0.19 5 5 2 1000 | Location ID: Sample Date: Units ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L | MW-20D2 03/16/06 0.30 U 0.30 U NA 0.50 U 0.50 U 0.40 U 0.40 U 0.30 U NA 0.30 U MW-22D | MW-20D2 06/22/06 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U | MW-20S 08/07/00 0.30 U 13 NA 0.20 U 0.30 U 14 0.80 U 0.80 U 0.40 U NA 0.60 U 0.70 U MW-22D 11/20/18 | MW-21 08/08/00 0.30 U 0.20 U NA 0.20 U 0.30 U 0.30 U 0.40 U NA 0.50 U 0.40 U NA 0.60 U 0.70 U MW-22D | MW-21 11/16/01 0.20 U 0.20 U NA 0.20 U 1.0 U 0.20 U NA 0.20 U 1.0 U 0.30 U 0.30 U 0.30 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U | MW-21 12/19/01 0.20 U 0.20 U NA 0.20 U 1.0 U 0.30 U 0.30 U 0.20 U NA 0.20 U 0.30 U 0.40 U 0.50 U 0.50 U | MW-21
10/07/02
0.30 U
0.40 U
NA
0.20 U
0.90 U
0.20 U
0.10 U
NA
0.30 U
0.30 U
0.30 U
 | MW-21
03/03/03
0.30 U
0.40 U
0.50 U
0.90 U
0.90 U
0.10 U
0.30 U
0.30 U
0.30 U
0.30 U
0.30 U | MW-21
10/09/03
0.30 U
0.50 U
0.50 U
0.20 U
0.30 U
0.30 U
0.30 U
0.30 U
0.30 U
0.20 U
0.20 U
0.20 U
0.20 U
0.20 U | MW-21
03/18/04
0.30 U
0.30 U
NA
0.20 U
0.30 U
0.30 U
0.30 U
0.50 U
0.20 U
MA
0.50 U
0.20 U | MW-21
10/11/04
0.30 U
0.40 U
0.40 U
0.30 U
0.90 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U | MW-21
03/23/05
0.30 U
0.40 U
0.40 U
0.30 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
 | MW-21
09/22/05
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U
0.40 U
0.40 U
0.30 U
0.30 U | MW-21
03/16/06
0.30 U
0.30 U
NA
0.50 U
0.40 U
0.40 U
NA
0.30 U
NA
0.30 U
MW-22S
10/09/03 | MW-21
06/22/06
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U
0.40 U
0.30 U
0.30 U
0.30 U | MW-22D 11/15/01 0.20 U 0.20 U NA 0.20 U 1.0 U 0.30 U 0.30 U 0.30 U 0.20 U 0.20 U 0.4 U 0.4 U 0.5 | MW-22D
12/19/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U
NA
0.20 U
NA
0.20 U
MW-22S
03/22/05 | MW-22D 09/17/02 0.30 U 82 NA 0.20 U 0.90 U 0.20 U 0.10 U NA 0.30 U 0.30 U 0.30 U 0.40 W 0.40 W 0.50 | MW-22D 03/04/03 0.30 U 0.40 U 0.50 U 0.50 U 0.90 U 0.20 U 0.10 U 0.30 U | MW-22D
10/09/03
0.30 U
0.30 U
0.50 U
0.20 U
0.30 U
0.20 U
0.20 U
0.20 U
0.50 U
0.20 U
0.20 U
0.20 U
0.50 U
0.50 U
 | MW-22D 03/18/04 0.30 U 0.30 U 0.30 U NA 0.20 U 0.80 U 0.30 U 0.50 U 0.20 U MW-23 08/08/00 | MW-22D
10/11/04
0.30 U
0.40 U
0.40 U
0.30 U
0.90 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U | MW-22D
03/22/05
0.30 U
0.40 U
0.40 U
0.30 U
0.90 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U | MW-22D 09/23/05 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U 0.30 U
 | MW-22D 03/16/06 0.30 U 1.3 NA 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U 0.40 U MW-23 09/17/02 | MW-22D 06/22/06 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U | MW-22D 05/03/11 1.0 U
 | MW-22D
11/20/14
1.0 U
1.0 U
1. | MW-22D
06/04/15
1.0 U
1.0 U
1. | MW-22D
11/16/15
1.0 U
1.0 U
1. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane Chloroethane Chloroform Methylene Chloride Tetrachloroethene Trichloroethene Ca-1,2-Dichloroethene Carton Disulfide Volatile Organics 1,1,2-Trichloroethane | \$ CAO Goal ³ 5 5 5 0.19 5 5 5 1 1000 | Location ID: Sample Date: Units ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L | MW-20D2 03/16/06 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U NA 0.30 U 0.40 U MW-22D | MW-20D2 06/22/06 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 10003/17 | MW-20S
08/07/00
0.30 U
13
NA
0.20 U
0.80 U
0.80 U
0.40 U
0.60 U
0.70 U
0.70 U
0.70 U
0.70 U | MW-21 08/08/00 0.30 U 0.20 U NA 0.20 U 0.80 U 0.40 U NA 0.70 U MW-22D | MW-21 11/16/01 0.20 U 0.20 U NA 0.20 U 1.0 U 0.30 U 0.30 U 0.30 U NA 0.20 U NA 0.20 U NA 0.20 U 1.0 U 0.30 U | MW-21 12/19/01 0.20 U 0.20 U NA 0.20 U 1.0 U 0.30 U 0.30 U NA 0.20 U 0.30 U NA 0.20 U 0.30 U NA 0.20 U 0.30 U 1.0 U 0.30 U | MW-21 10/07/02 0.30 U 0.40 U NA 0.20 U 0.90 U 0.10 U NA 0.30 U 0.90 U 0.10 U NA 0.30 U 0.30 U 0.10 U NA 0.30 U 0.30 U | MW-21
03/03/03
030 U
040 U
0.50 U
0.50 U
0.20 U
0.10 U
0.30 U
0.30 U
0.30 U
0.80 U
0.80 U
0.80 U
0.80 U
0.80 U | MW-21
10/09/03
0.30 U
0.30 U
0.50 U
0.50 U
0.20 U
0.30 U
0.20 U
0.20 U
0.20 U
0.20 U
0.20 U
0.20 U
0.30 U | MW-21
03/18/04
0.30 U
0.30 U
NA
0.20 U
0.80 U
0.30 U
0.20 U
NA
0.50 U
0.20 U
MW-22S
11/15/01 | MW-21
10/11/04
0.30 U
0.40 U
0.40 U
0.40 U
0.30 U
0.90 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.20 U | MW-21 03/23/05 0.30 U 0.40 U 0.20 U | MW-21
09/22/05
0.30 U
0.30 U
0.30 U
0.50 U
0.50 U
0.40 U
0.40 U
0.40 U
0.30 U
0.30 U
0.30 U
0.30 U | MW-21 03/16/06 0.30 U 0.30 U 0.30 U NA 0.50 U 0.50 U 0.40 U NA 0.30 U 0.40 U | MW-21
06/22/06
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U
0.40 U
0.40 U
0.30 U
0.30 U
0.30 U
0.30 U | MW-22D
11/15/01
0.20 U
0.20 U
0.20 U
0.30 U
1.0 U
0.30 U
NA
0.20 U
NA
0.20 U
0.30 U
NA
0.20 U
0.30 U
0.30 U
0.30 U
0.30 U
0.30 U
0.30 U
0.30 U | MW-22D
12/19/01
0.20 U
0.20 U
NA
0.20 U
1.0 U
0.30 U
0.30 U
NA
0.20 U
0.20 U
MW-22S
03/22/05 | MW-22D
09/17/02
0.30 U
82
NA
0.20 U
0.90 U
0.20 U
0.10 U
NA
0.30 U
0.30 U
MW-22S
09/23/05 | MW-22D 03/04/03 0.30 U 0.40 U 0.50 U 0.50 U 0.90 U 0.20 U 0.30 U | MW-22D
10/09/03
0.30 U
0.50 U
0.50 U
0.80 U
0.30 U
0.20 U
0.20 U
0.20 U
0.20 U
0.20 U
0.20 U
0.30 U | MW-22D
03/18/04
0.30 U
0.30 U
NA
0.20 U
0.80 U
0.30 U
0.20 U
NA
0.50 U
0.50 U
0.20 U | MW-22D
10/11/04
0.30 U
0.40 U
0.40 U
0.30 U
0.90 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U | MW-22D
03/22/05
0.30 U
0.40 U
0.40 U
0.30 U
0.90 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U | MW-22D
09/23/05
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U
0.40 U
0.40 U
0.30 U
0.30 U
0.40 U
0.40 U
0.30 U
0.40 U
0.40 U
0.40 U
0.30 U
0.40 | MW-22D 03/16/06 0.30 U 1.3 NA 0.50 U 0.50 U 0.40 U NA 0.30 U 0.40 | MW-22D 06/22/06 0.30 U 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U MW-23 12/19/02 | MW-22D
05/03/11
1.0 U
1.0 U | MW-22D
11/20/4
1.0 U
1.0 | MW-22D
06/04/15
1.0 U
1.0 U
1. | MW-22D
11/16/15
1.0 U
1.0 U
1. |
| Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chloroethane Chloroethene Trichloroethene Cis-1,2-Dichloroethene Vinyl Chloride Carbon Disulfide Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane | CAO Goal 5 5 5 0.19 5 5 2 1000 | Location ID: Sample Date: Units ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L | MW-20D2 03/16/06 0.30 U 0.30 U NA 0.50 U 0.40 U 0.40 U NA 0.30 U 0.40 U NA 0.30 U 0.40 U NA 0.30 U 0.40 U NA 0.50 U 0.40 U NA 0.30 U 0.40 U 0.40 U 0.40 U 0.50 U 0.50 U 0.50 U 0.50 U 0.50 U 0.50 U | MW-20D2 06/22/06 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U 0.30 T 0.30 U 0.30 U 0.30 U 0.30 U | MW-20S 08/07/00 0.30 U 13 NA 0.20 U 0.30 U 0.30 U 14 0.80 U 0.80 U 0.40 U NA 0.60 U 0.70 U MW-22D 11/20/18 | MW-21 08/08/00 0.30 U 0.20 U NA 0.20 U 0.30 U 0.30 U 0.40 U 0.50 U 0.70 U 0.70 U 0.70 U 0.70 U 1.0 U | MW-21 11/16/01 0.20 U 0.20 U NA 0.20 U 1.0 U 0.30 U 0.30 U 0.30 U NA 0.20 U 1.0 U 0.30 U 0.50 U 0.50 U 0.50 U 0.50 U | MW-21 12/19/01 0.20 U 0.20 U NA 0.20 U 1.0 U 0.30 U 0.30 U NA 0.20 U 0.30 U 0.40 U 0.50 U 0.50 U 0.50 U 0.50 U 0.50 U 0.50 U | MW-21 10/07/02 0.30 U 0.40 U NA 0.20 U 0.90 U 0.10 U NA 0.30 U 0.30 U 0.10 U NA 0.30 U 0.10 U NA 0.30 U 0.50 U 0.50 U 0.50 U 0.50 U | MW-21 03/03/03 0.30 U 0.40 U 0.50 U 0.50 U 0.90 U 0.90 U 0.10 U 0.30 U | MW-21
10/09/03
0.30 U
0.30 U
0.50 U
0.50 U
0.80 U
0.20 U
0.50 U
0.20 U
0.50 U
0.20 U
0.50 U
0.30 U
0.20 U
0.30 U
0.20 U
0.30 U | MW-21
03/18/04
0.30 U
0.30 U
NA
0.20 U
0.80 U
0.30 U
0.20 U
NA
0.50 U
0.50 U
0.20 U
MW-22S
11/15/01 | MW-21
10/11/04
0.30 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.20 U
MW-22S
12/19/01 | MW-21
03/23/05
0.30 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.20 U
MW-22S
10/07/02 | MW-21 09/22/05 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.40 U | MW-21 03/16/06 0.30 U 0.30 U NA 0.50 U 0.40 U 0.40 U NA 0.30 U MW-22S 10/09/03 | MW-21 06/22/06 0.30 U 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U | MW-22D 11/15/01 0.20 U 0.20 U 0.20 U NA 0.20 U 1.0 U 0.30 U 0.30 U 0.30 U 0.20 U 0.30 U 0.40 U | MW-22D 12/19/01 0.20 U 0.20 U 0.20 U NA 0.20 U 1.0 U 0.30 U 0.40 U | MW-22D 09/17/02 0.30 U 82 NA 0.20 U 0.90 U 0.10 U NA 0.30 U S 09/330 U 0.30 U 0.30 U 0.30 U | MW-22D 03/04/03 0.30 U 0.40 U 0.50 U 0.50 U 0.90 U 0.10 U 0.30 U | MW-22D
10/09/03
0.30 U
0.50 U
0.50 U
0.50 U
0.80 U
0.20 U
0.50 U
0.20 U
0.50 U
0.20 U
0.50 U
0.50 U
0.50 U
0.50 U
0.50 U | 0.30 U 0.30 U 0.30 U NA 0.20 U 0.30 U 0.30 U NA 0.20 U 0.30 U 0.20 U 0.30 U 0.20 U 0.50 U 0.50 U 0.70 U 0.70 U 0.70 U | MW-22D
10/11/04
0.30 U
0.40 U
0.40 U
0.30 U
0.30 U
0.30 U
0.40 U | MW-22D
03/22/05
0.30 U
0.40 U
0.40 U
0.30 U
0.30 U
0.40 U | MW-22D 09/23/05 0.30 U 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U 0.30 U | MW-22D 03/16/06 0.30 U 1.3 NA 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U 0.40 U 1.4 U 0.50 U 0.50 U 0.50 U 0.40 U 1.4 U 0.50 U 0.50 U | 0.30 U 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U 0.41 U 0.41 U 0.42 U 0.45 U 0. | MW-22D 05/03/11 1.0 U | MW-22D
11/20/14
1.0 U
1.0 U
1. | MW-22D 06/04/15 1.0 U 1 | MW-22D
11/16/15
1.0 U
1.0 U |
| Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chloroethane Chloroethane Chloroethane Chloroethane Chloroethane Carbon Carbon Carbon Carbon Disulfide Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,3-Dichloroethane 1,3-Dichloroethane 1,3-Dichloroethane 1,3-Dichloroethane | \$ CAO Goal 5 5 5 5 5 5 5 5 5 | Location ID: Sample Date: Units ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L | MW-20D2 03/16/06 0.30 U 0.30 U NA 0.50 U 0.50 U 0.40 U NA 0.30 U NA 0.30 U | MW-20D2 06/22/06 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 10/03/17 10/03/17 | MW-20S 08/07/00 13 NA 0.20 U 13 NA 0.20 U 0.80 U 0.80 U 0.70 U 0.70 U 0.70 U 11/20/18 | MW-21 08/08/00 0.30 U 0.20 U NA 0.20 U 0.30 U 0.30 U 0.40 U 0.30 U 0.40 U 0.40 U 0.50 U 0.70 U 0.70 U 0.70 U 1.0 U 1.0 U | MW-21 11/16/01 0.20 U 0.20 U NA 0.20 U 1.0 U 0.30 U 0.30 U 0.30 U 0.30 U NA 0.20 U 1.0 U 0.30 U | MW-21 12/19/01 0.20 U 0.20 U 0.20 U NA 0.20 U 1.0 U 0.30 U NA 0.20 U 0.30 U NA 0.20 U 0.30 U 1.0 U 0.30 U 1.0 U 0.50 U 0.50 U 0.50 U 0.50 U 0.50 U | MW-21 10/07/02 0.30 U 0.40 U NA 0.20 U 0.90 U 0.90 U 0.10 U NA 0.30 U 0.30 U 0.40 U NA 0.50 U | MW-21 03/03/03 030 U 040 U 040 U 050 U 0.50 U 0.20 U 0.90 U 0.30 U | MW-21 10/09/03 0.30 U 0.30 U 0.50 U 0.50 U 0.20 U 0.80 U 0.20 U 0.20 U 0.20 U 0.20 U 0.50 U 0.20 U | MW-21
03/18/04
0.30 U
0.30 U
0.30 U
NA
0.20 U
0.80 U
0.20 U
0.30 U
0.20 U
NA
0.50 U
0.20 U
NA
0.50 U
0.20 U
0.20 U
0.20 U
0.20 U
NA
0.20 U
NA
0.20 U
NA
0.20 U
NA
0.20 U
NA
0.30 U
NA
0.30 U
0.30 U
0.00 U
0. | MW-21
10/11/04
0.30 U
0.40 U
0.40 U
0.30 U
0.90 U
0.40 U
0.40 U
0.40 U
0.20 U
MW-22S
12/19/01 | MW-21
03/23/05
0.30 U
0.40 U
0.40 U
0.30 U
0.90 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.20 U
MW-22S
10/07/02 | MW-21 09/22/05 0.30 U 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U 0.40 U 0.30 U 0.30 U 0.40 U 0.30 U 0.40 U 0.30 U 0.40 U 0.30 U | MW-21
03/16/06
0.30 U
0.30 U
NA
0.50 U
0.50 U
0.40 U
0.50 U | MW-21 06/22/06 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U | MW-22D 11/15/01 0.20 U 0.20 U 0.20 U NA 0.20 U 1.0 U 0.30 U 1.0 U 0.30 U NA 0.20 U 0.30 U NA 0.20 U 0.30 U 0.30 U 0.30 U 0.40 U 0.40 U | MW-22D 12/19/01 0.20 U 0.20 U NA 0.20 U NA 0.20 U 1.0 U 0.30 U 1.0 U 0.30 U 0.30 U 0.20 U MW-22S 03/22/05 0.30 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U | MW-22D
09/17/02
0.30 U
82
NA
0.20 U
0.90 U
0.20 U
0.10 U
NA
0.30 U
0.30 U
0.30 U
0.30 U
0.30 U
0.30 U
0.30 U | MW-22D 03/04/03 0.30 U 0.40 U 0.50 U 0.50 U 0.20 U 0.90 U 0.30 U | MW-22D
10/09/03
0.30 U
0.50 U
0.50 U
0.80 U
0.80 U
0.20 U
0.20 U
0.20 U
0.20 U
0.50 U | MW-22D 03/18/04 0.30 U 0.30 U 0.30 U NA 0.20 U 0.80 U 0.80 U 0.20 U NA 0.50 U 0.20 U MW-23 08/08/00 | MW-22D
10/11/04
0.30 U
0.40 U
0.40 U
0.30 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.20 U
0.40 U
0.20 U
0.40 U | MW-22D 03/22/05 0.30 U 0.40 U 0.40 U 0.40 U 0.30 U 0.40 U | MW-22D
09/23/05
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U
0.40 U
0.30 U
0.40 U
0.30 U
0.30 U
0.40 U
0.30 U
0.30 U
0.40 U
0.40 U
0.30 U
0.30 U
0.40 U
0.40 U
0.30 U
0.30 U
0.40 U
0.40 U
0.30 U
0.30 U
0.40 | MW-22D 03/16/06 0.30 U 1.3 NA 0.50 U 0.40 U 0.40 U 0.40 U 0.40 U 0.30 U 0.40 U 0.40 U 1.4 U 0.30 U 0.40 U 1.4 U 0.30 U | MW-22D 06/22/06 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U 0.40 U 0.40 U 0.30 U 1.4 U 700 2.4 U | MW-22D
05/03/11
1.0 U
1.0 U
1. | MW-22D
11/20/14
1.0 U
1.0 U
1. | MW-22D 06/04/15 1.0 U 1 | MW-22D
11/16/15
1.0 U
1.0 U |
| Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane Chloroethane Chloroethane Chloroethene Trichloroethene Cis-1,2-Dichloroethene Cis-1,2-Dichloroethene Cis-1,2-Dichloroethene Vinyl Chloride Carbon Disulfide Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane Chloroethane Chloroethane Chloroethane Chloroethane Chloroform | CAO Goal 5 5 5 0.19 5 5 2 1000 | Location ID: Sample Date: Units Units Upt | MW-20D2 03/16/06 0.30 U 0.30 U NA 0.50 U 0.40 U 0.40 U NA 0.30 U | MW-20D2 06/22/06 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 T 1.00 U 1.0 U | MW-20S 08/07/00 0.30 U 13 NA 0.20 U 0.30 U 0.30 U 14 0.80 U 0.80 U 0.40 U NA 0.60 U 0.70 U MW-22D 11/20/18 | MW-21 08/08/00 0.30 U 0.20 U NA 0.20 U 0.30 U 0.30 U 0.40 U NA 0.66 U 0.70 U MW-22D 09/20/19 | MW-21 11/16/01 0.20 U 0.20 U NA 0.20 U 1.0 U 0.30 U 0.30 U 0.30 U NA 0.20 U 0.50 U | MW-21 12/19/01 0.20 U 0.20 U 0.20 U NA 0.20 U 1.0 U 0.30 U 0.30 U 0.30 U 0.20 U 0.20 U 0.50 U 0.50 U 0.50 U 0.50 U 0.50 U 0.50 U | MW-21 10/07/02 0.30 U 0.40 U NA 0.20 U 0.10 U 0.10 U NA 0.30 U 0.10 U NA 0.30 U 0.10 U NA 0.30 U 0.10 U 0.50 U 0.10 U 0.50 U 0.10 U 0.50 U 0.50 U 0.50 U 0.50 U 0.50 U | MW-21 03/03/03 0.30 U 0.40 U 0.50 U 0.50 U 0.20 U 0.90 U 0.30 U | MW-21
10/09/03
0.30 U
0.30 U
0.50 U
0.50 U
0.80 U
0.80 U
0.20 U
0.00 U
0 | MW-21
03/18/04
0.30 U
0.30 U
NA
0.20 U
0.80 U
0.30 U
0.20 U
0.50 U
0.50 U
0.20 U
MW-22S
11/15/01
0.20 U
NA
0.20 U | MW-21
10/1/04
0.30 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.40 U
0.20 U
MW-22S
12/19/01
0.20 U
NA | MW-21 03/23/05 0.30 U 0.40 U 0 | MW-21 09/22/05 0.30 U 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U 0.30 U 0.40 U 0.40 U 0.40 U 0.40 U 0.50 U | MW-21 03/16/06 0.30 U 0.30 U NA 0.50 U 0.40 U 0.40 U NA 0.30 U MW-22S 10/09/03 | MW-21 06/22/06 0.30 U 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U MW-22S 03/18/04 0.30 U NA 0.30 U NA | MW-22D 11/15/01 0.20 U 0.20 U 0.20 U NA 0.20 U 1.0 U 0.30 U 0.30 U 0.30 U 0.20 U 0.30 U 0.30 U 0.30 U 0.40 U 0.40 U 0.40 U 0.30 U | MW-22D 12/19/01 0.20 U 0.20 U 0.20 U 0.20 U NA 0.20 U 1.0 U 0.30 U 0.30 U NA 0.20 U 0.30 U 0.30 U 0.30 U 0.40 U 0.30 U | MW-22D 09/17/02 0.30 U 82 NA 0.20 U 0.90 U 0.10 U NA 0.30 U | MW-22D 03/04/03 0.30 U 0.40 U 0.50 U 0.20 U 0.20 U 0.20 U 0.30 U | MW-22D
10/09/03
0.30 U
0.30 U
0.50 U
0.50 U
0.20 U
0.20 U
0.20 U
0.50 U
0.20 U
0.50 U
0.20 U
0.50 U
0.20 U
0.30 U
0.50 U | MW-22D 03/18/04 0.30 U 0.30 U 0.30 U NA 0.20 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.20 U NA 0.50 U 0.20 U MW-23 08/08/00 0.70 0.70 880 NA | MW-22D 10/11/04 0.30 U 0.40 U 0.40 U 0.30 U 0.40 U 0.30 U 0.40 U 0.30 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.20 U MW-23 11/20/01 2.0 U 920 NA 1.9 U | MW-22D 03/22/05 0.30 U 0.40 U 0.40 U 0.30 U 0.40 U 0.30 U 0.40 U | MW-22D 09/23/05 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.40 U | MW-22D 03/16/06 0.30 U 1.3 NA 0.50 U 0.40 U 0.40 U NA 0.30 U 0.40 U NA 0.30 U 0.40 U NA 0.40 U NA 0.50 U 0.50 U 0.40 U NA 0.50 U 0 | MW-22D 06/22/06 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.40 U | MW-22D 05/03/11 1.0 U 1 | MW-22D
11/20/14
1.0 U
1.0 U
1. | MW-22D 06/04/15 1.0 U | MW-22D
11/16/15
1.0 U
1.0 U |
| Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chloroethane Chloroethane Chloroethane Chloroethane Chloroethane Carbon Carbon Carbon Carbon Disulfide Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,3-Dichloroethane 1,3-Dichloroethane 1,3-Dichloroethane 1,3-Dichloroethane | CAO Goal ¹ 5 5 5 0.19 5 5 5 5 2 1000 | Location ID: Sample Date: Units ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L | MW-20D2 03/16/06 0.30 U 0.30 U NA 0.50 U 0.50 U 0.40 U NA 0.30 U NA 0.30 U | MW-20D2 06/22/06 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 10/03/17 10/03/17 | MW-20S 08/07/00 13 NA 0.20 U 13 NA 0.20 U 0.80 U 0.80 U 0.70 U 0.70 U 0.70 U 11/20/18 | MW-21 08/08/00 0.30 U 0.20 U NA 0.20 U 0.30 U 0.30 U 0.40 U 0.30 U 0.40 U 0.40 U 0.50 U 0.70 U 0.70 U 0.70 U 1.0 U 1.0 U | MW-21 11/16/01 0.20 U 0.20 U NA 0.20 U 1.0 U 0.30 U 0.30 U 0.30 U 0.30 U NA 0.20 U 1.0 U 0.30 U | MW-21 12/19/01 0.20 U 0.20 U 0.20 U NA 0.20 U 1.0 U 0.30 U NA 0.20 U 0.30 U NA 0.20 U 0.30 U 1.0 U 0.30 U 1.0 U 0.50 U 0.50 U 0.50 U 0.50 U 0.50 U | MW-21 10/07/02 0.30 U 0.40 U NA 0.20 U 0.90 U 0.90 U 0.10 U NA 0.30 U 0.30 U 0.40 U NA 0.50 U | MW-21 03/03/03 030 U 040 U 040 U 050 U 0.50 U 0.20 U 0.90 U 0.30 U | MW-21
1009/03
0.30 U
0.30 U
0.50 U
0.20 U
0.80 U
0.20 U | MW-21
03/18/04
0.30 U
0.30 U
0.30 U
NA
0.20 U
0.80 U
0.20 U
0.30 U
0.20 U
NA
0.50 U
0.20 U
NA
0.50 U
0.20 U
0.20 U
0.20 U
0.20 U
NA
0.20 U
NA
0.20 U
NA
0.20 U
NA
0.20 U
NA
0.30 U
NA
0.30 U
0.30 U
0.00 U
0. | MW-21
10/11/04
0.30 U
0.40 U
0.40 U
0.30 U
0.90 U
0.40 U
0.40 U
0.40 U
0.20 U
MW-22S
12/19/01 | MW-21
03/23/05
0.30 U
0.40 U
0.30 U
0.30 U
0.30 U
0.40 U
0 | MW-21 09/22/05 0.30 U 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U 0.40 U 0.30 U 0.30 U 0.40 U 0.30 U 0.40 U 0.30 U 0.40 U 0.30 U | MW-21
03/16/06
0.30 U
0.30 U
NA
0.50 U
0.50 U
0.40 U
0.50 U | MW-21
06/22/06
0.30 U
0.30 U
0.20 U
0.50 U
0.50 U
0.40 U
0.40 U
0.40 U
0.30 U
0.30 U
0.30 U
0.30 U
0.30 U
0.30 U
0.30 U
0.30 U | MW-22D 11/15/01 0.20 U 0.20 U 0.20 U NA 0.20 U 1.0 U 0.30 U 0.30 U 0.30 U 0.20 U 0.20 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U 0.40 U 0.30 U 0.30 U 0.30 U 0.40 U 0.30 U | MW-22D 12/19/01 0.20 U 0.20 U NA 0.20 U NA 0.20 U 1.0 U 0.30 U 1.0 U 0.30 U 0.30 U 0.20 U 0.30 U 0.30 U 0.40 U | MW-22D
09/17/02
0.30 U
82
NA
0.20 U
0.90 U
0.20 U
0.10 U
NA
0.30 U
0.30 U
0.30 U
0.30 U
0.30 U
0.30 U
0.30 U | MW-22D 03/04/03 0.30 U 0.40 U 0.50 U 0.50 U 0.20 U 0.90 U 0.30 U | MW-22D
10/09/03
0.30 U
0.50 U
0.50 U
0.80 U
0.80 U
0.20 U
0.20 U
0.20 U
0.20 U
0.50 U | MW-22D 03/18/04 0.30 U 0.30 U 0.30 U NA 0.20 U 0.80 U 0.80 U 0.20 U NA 0.50 U 0.20 U MW-23 08/08/00 | MW-22D
10/11/04
0.30 U
0.40 U
0.40 U
0.30 U
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0.40 U | MW-22D 03/22/05 0.30 U 0.40 U 0.40 U 0.40 U 0.30 U 0.40 U | MW-22D
09/23/05
0.30 U
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0.40 U
0.50 | MW-22D 03/16/06 0.30 U 1.3 NA 0.50 U 0.40 U 0.40 U 0.30 U MW-23 09/17/02 1.4 U 570 NA 1.2 U 4.4 U | MW-22D 06/22/06 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U 0.40 U 0.40 U 0.30 U 1.4 U 700 2.4 U | MW-22D
05/03/11
1.0 U
1.0 U
1. | MW-22D
11/20/14
1.0 U
1.0 U
1. | MW-22D 06/04/15 1.0 U 490 NA 1.0 U 4.0 U | MW-22D
11/16/15
1.0 U
1.0 U |
| Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chloroethane Chloroethane Chloroethane Chloroethane Trichloroethene Trichloroethene Ca-1,2-Dichloroethane Chloroethane Carbon Olsuffide Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane Chloroethane Chloroform Methylene Chloride Methylene Chloride | CAO Goal ¹ 5 5 5 0.19 5 5 5 5 2 1000 | Location ID: Sample Date: Units Units Upt | MW-20D2 03/16/06 0.30 U 0.30 U NA 0.50 U 0.40 U 0.40 U 0.40 U 0.50 U 0.40 U 0.50 U 0.40 U NA 0.50 U 0.30 U 0.40 U 0.40 U 0.50 U | MW-20D2 06/22/06 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 10/03/17 1.0 U 2.2 1.0 U 1.0 U | MW-20S 08/07/00 13 NA 0.20 U 13, NA 0.20 U 0.80 U 0.80 U 0.80 U 0.80 U 11/20/18 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U | MW-21 08/08/00 0.30 U 0.20 U NA 0.20 U 0.30 U 0.30 U 0.40 U 0.30 U 0.40 U NA 0.60 U 0.60 U 0.70 U 0.70 U 1.0 U 1.0 U 1.0 U | MW-21 11/16/01 0.20 U 0.20 U 0.20 U NA 0.20 U 0.30 U 0.30 U 0.30 U NA 0.20 U 0.20 U 0.30 U 0.20 U 0.20 U 0.20 U 1.0 U 0.30 U 0.20 U 1.0 U 0.55 J 1.0 U 1.0 U 1.0 U | MW-21 12/19/01 0.20 U 0.20 U 0.20 U NA 1.0 U 0.30 U 0.30 U NA 0.20 U 0.30 U NA 0.20 U 0.30 U 1.0 U 0.50 U 0 | MW-21
10/07/02
0.30 U
0.40 U
NA
0.20 U
0.10 U
0.10 U
0.30 U
0.30 U
0.30 U
0.50 | MW-21
03/03/03
0.30 U
0.40 U
0.55 U
0.20 U
0.20 U
0.30 U
0.30 U
0.30 U
0.30 U
0.80 U
0 | MW-21
10/09/03
0.30 U
0.30 U
0.50 U
0.50 U
0.80 U
0.80 U
0.20 U
0.00 U
0 | MW-21
03/18/04
0.30 U
0.30 U
0.30 U
0.20 U
0.80 U
0.30 U
0.20 U
0.30 U
0.20 U
NA
0.50 U
0.20 U
0.00 U
0.00 U
0.00 U
0.00 U
0.00 U
0.00 U
0.00 U
0.00 U
0.00 | MW-21 10/11/04 0.30 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U 0.30 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.20 U MW-22S 12/19/01 0.20 U 0.20 U 0.20 U 0.20 U 1.0 U | MW-21 03/23/05 0.30 U 0.40 U 0 | MW-21 09/22/05 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U 0.40 U 0.50 U 0.50 U 0.40 U 0.40 U 0.50 U | MW-21 03/16/06 0.30 U 0.30 U NA 0.50 U 0.40 U 0.40 U NA 0.50 U 0.40 U NA 0.50 U 0.40 U NA 0.50 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.50 U | MW-21 06/22/06 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.50 U 0.40 U 0.40 U 0.30 U | MW-22D 11/15/01 0.20 U 0.20 U 0.20 U NA 0.20 U 1.0 U 0.30 U 0.30 U 0.30 U 0.20 U 0.30 U 0.30 U 0.30 U 0.40 U 0.40 U 0.40 U 0.30 U | MW-22D 12/19/01 0.20 U 0.20 U 0.20 U 0.20 U 0.20 U 1.0 U 0.20 U 1.0 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.30 U 0.90 U | MW-22D
09/17/02
0.30 U
82
NA
0.20 U
0.90 U
0.10 U
NA
0.30 U
0.30 U
0.30 U
0.30 U
0.30 U
0.30 U
0.30 U
0.30 U
0.50 U
0.50 U | MW-22D
03/04/03
0.30 U
0.40 U
0.50 U
0.50 U
0.20 U
0.30 U | MW-22D
10/09/03
0.30 U
0.30 U
0.50 U
0.50 U
0.80 U
0.80 U
0.80 U
0.50 U | MW-22D 03/18/04 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.80 U 0.80 U 0.80 U 0.20 U 0.20 U 0.30 U 0.20 U 0.30 U | MW-22D 10/11/04 0.30 U 0.40 U 0.40 U 0.30 U 0.40 U 0.30 U 0.40 U | MW-22D 03/22/05 0.30 U 0.40 U 0.40 U 0.30 U 0.40 U 0.30 U 0.40 U | MW-22D
09/23/05
03/0 U
0.30 U
0.30 U
0.50 U
0.50 U
0.40 U
0.40 U
0.40 U
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0.30 U
0.30 U
0.40 U
0.40 U
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0.50 U
0.50 U
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0.40 U
0.50 U | MW-22D 03/16/06 0.30 U 1.3 NA 0.50 U 0.40 U 0.40 U NA 0.30 U 0.40 U NA 0.30 U 0.40 U NA 0.40 U NA 0.50 U 0.50 U 0.40 U NA 0.50 U 0 | MW-22D 06/22/06 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U 12/19/02 14.4 U 700 2.4 U 1.2 U 4.4 U 4.4 U | MW-22D 05/03/11 1.0 U 1 | MW-22D
11/20/14
1.0 U
1.0 U
1. | MW-22D 06/04/15 1.0 U | MW-22D
11/16/15
1.0 U
1.0 U |
| Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chloroethane Chloroethene Trichloroethene Cis-1,2-Dichloroethene Cis-1,2-Dichloroethene Cis-1,2-Dichloroethene Carbon Disuffide Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chloroethane Chloroethane Chloroethane Chloroethene Methylene Chloride Tetrachloroethene | CAO Goal ¹ 5 5 5 0.19 5 5 5 5 2 1000 | Location ID: Sample Date: Units Units Upt | MW-20D2 03/16/06 0.30 U 0.30 U NA 0.50 U 0.40 U 0.40 U NA 0.30 U 0.40 U NA 0.50 U 0.40 U NA 0.50 U 0.40 U NA 0.50 U 0.40 U 0.40 U 0.40 U 0.50 U 0.40 U | MW-20D2 06/22/06 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 T 0.30 U | MW-20S 08/07/00 0.30 U 13 NA 0.20 U 0.30 U 0.30 U 14 0.80 U 0.80 U 0.40 U NA 0.60 U 0.70 U MW-22D 11/20/18 | MW-21 08/08/00 0.30 U 0.20 U NA 0.20 U 0.30 U 0.30 U 0.40 U NA 0.60 U 0.70 U 09/20/19 1.0 U 1.6 1.0 U 1.0 U NA | MW-21 11/16/01 0.20 U 0.20 U NA 0.20 U 1.0 U 0.30 U 0.30 U 0.30 U 0.30 U 0.40 U 0.50 U | MW-21 12/19/01 0.20 U 0.20 U NA 0.20 U 1.0 U 0.30 U 0.30 U 0.20 U 0.40 U 0.50 U | MW-21 10/07/02 0.30 U 0.40 U NA 0.20 U 0.20 U 0.30 U 0.65 J 1.0 U 1.0 U 1.0 U 1.0 U | MW-21 03/03/03 0.30 U 0.40 U 0.50 U 0.20 U 0.20 U 0.30 U | MW-21
1009/03
0.30 U
0.30 U
0.50 U
0.20 U
0.30 U
0.20 U
0.20 U
0.20 U
0.20 U
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0. | MW-21
03/18/04
0.30 U
0.30 U
0.30 U
0.80 U
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0.30 U
0.20 U
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0.20 U
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0.00 U
0 | MW-21 10F1/04 0.30 U 0.40 U 0.40 U 0.40 U 0.30 U 0.90 U 0.40 U 0.40 U 0.40 U 0.20 U MW-22S 12F1/901 0.20 U 0.40 U 0.20 U | MW-21 03/23/05 0.30 U 0.40 U 0.40 U 0.40 U 0.30 U 0.40 U 0 | MW-21 09/22/05 0.30 U 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U 0.30 U 0.40 U 0.30 U 0.30 U 0.40 U 0.30 U 0.30 U 0.30 U | MW-21 03/16/06 0.30 U 0.30 U NA 0.50 U 0.40 U 0.40 U NA 0.30 U NA 0.30 U 0.40 U NA 0.30 U 0.30 U 0.30 U 0.40 U 0.30 U 0.40 U 0.30 U | MW-21 06/22/06 0.30 U 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U MW-22S 03/18/04 0.30 U | MW-22D 11/15/01 0.20 U 0.20 U 0.20 U NA 0.20 U 1.0 U 0.30 U 0.30 U 0.30 U 0.20 U 0.30 U 0.30 U 0.40 U 0.40 U 0.40 U 0.30 U 0.40 U 0.40 U 0.40 U 0.40 U | MW-22D 12/19/01 0.20 U 0.20 U 0.20 U 0.20 U NA 0.20 U 1.0 U 0.30 U 1.0 U 0.30 U NA 0.20 U 0.30 U NA 0.20 U 0.40 U | MW-22D
0917702
0.30 U
82
NA
0.20 U
0.90 U
0.20 U
0.30 U | MW-22D 03/04/03 0.30 U 0.40 U 0.50 U 0.20 U 0.20 U 0.20 U 0.30 U | MW-22D
10/09/03
0.30 U
0.30 U
0.50 U
0.20 U
0.30 U
0.20 U
0.20 U
0.20 U
0.20 U
0.20 U
0.50 U | MW-22D 03/18/04 0.30 U 0.30 U 0.30 U NA 0.20 U 0.30 U 0.30 U 0.30 U 0.30 U 0.20 U 0.20 U 0.20 U 0.50 U 0.50 U 0.50 U 0.50 U 0.50 U 0.70 | MW-22D 10/11/04 0.30 U 0.40 U 0.40 U 0.30 U 0.40 U 0.30 U 0.40 U 0.30 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.20 U MW-23 11/20/01 2.0 U 920 NA 1.9 U 10 U 10 U 2.6 U | MW-22D 03/22/05 0.30 U 0.40 U 0.40 U 0.30 U 0.40 U 0.30 U 0.40 U 0.50 U | MW-22D
09/23/05
030 U
030 U
030 U
050 U
050 U
040 U
040 U
030 U
040 U
04 | MW-22D 03/16/06 03/16 | MW-22D 06/22/06 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U 0.30 U 12/19/02 | MW-22D 05/03/11 1.0 U 1 | MW-22D
11/20/14
1.0 U
1.0 U
1. | MW-22D
06/04/15
1.0 U
1.0 U
1. | MW-22D
11/16/15
1.0 U
1.0 U |
| Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chloroethane Chloroethane Chloroethane Chloroethene Trichloroethene Trichloroethene Ca-1,2-Dichloroethane Cynyi Chloroethane Vinyi Chloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chloroethane Chloroethane Chloroethene Trichloroethene Trichloroethene | \$ CAO Goal 5 5 5 5 5 5 5 5 5 | Location ID: Sample Date: Units up;L up;L up;L up;L up;L up;L up;L up;L | MW-20D2 03/16/06 0.30 U 0.30 U NA 0.50 U 0.40 U 0.40 U 0.40 U NA 0.50 U 0.30 U 0.40 U 0.40 U 0.50 U | MW-20D2 06/22/06 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 10/03/17 1.0 U 2.2 1.0 U 1.0 U NA NA 1.0 U 1.0 U | MW-20S 08/07/00 13 NA 0.20 U 13 NA 0.20 U 0.30 U 13 NA 0.20 U 0.40 U 0.40 U NA 0.60 U 11/20/18 11/20/18 1.0 U 1.0 U | MW-21 08/08/00 0.30 U 0.20 U NA 0.20 U 0.30 U 0.30 U 0.40 U NA 0.30 U 0.40 U NA 0.50 U 0.50 U 0.70 U 1.0 U 1.0 U 1.0 U 1.0 U NA 1.0 U NA | MW-21 11/16/01 0.20 U 0.20 U 0.20 U NA 0.20 U 0.30 U 0.30 U 0.30 U 0.30 U 0.20 U 0.20 U 1.0 U 0.30 U 0.20 U 0.20 U 0.20 U 1.0 U 0.55 J 1.0 U 1.0 U 1.0 U 1.0 U | MW-21 12/19/01 0.20 U 0.20 U 0.20 U NA 0.20 U 1.0 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 1.0 U 0.30 U | MW-21 10/07/02 0.30 U 0.40 U NA NA 0.20 U 0.10 U | MW-21
03/03/03
0.30 U
0.40 U
0.50 U
0.20 U
0.20 U
0.30 U
0 | MW-21 1009/03 0.30 U 0.30 U 0.30 U 0.50 U 0.20 U 0.80 U 0.20 U 0.80 U 0.20 U 0.80 U 0.20 U 0.30 U | MW-21 03/18/04 0.30 U 0.30 U 0.30 U NA 0.20 U 0.30 U 0.30 U NA 0.20 U 0.30 U 0.30 U 0.20 U NA 11/15/01 0.20 U 0.30 U 0.30 U | MW-21 10/11/04 0.30 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.20 U MW-22S 12/19/01 0.20 U 0.20 U 0.20 U 0.30 U | MW-21 03/23/05 0.30 U 0.40 U 0.40 U 0.30 U 0.30 U 0.40 U 0.20 U MW-225 0.30 U 0.40 U 0 | MW-21 09/22/05 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U 0.40 U 0.30 U 0.30 U 0.40 U 0.30 U 0.40 U 0.40 U 0.50 U | MW-21 03/16/06 0.30 U 0.30 U NA 0.50 U 0.40 U 0.40 U NA 0.50 U 0.40 U MA 0.30 U | MW-21 06/22/06 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U | MW-22D 11/15/01 0.20 U 0.20 U NA 0.20 U 1.0 U 0.30 U 0.30 U 0.30 U 0.20 U 0.40 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U 0.40 U 0.40 U 0.90 U | MW-22D 12/19/01 0.20 U 0.20 U 0.20 U 0.20 U 0.20 U 1.0 U 0.20 U 1.0 U 0.30 U 0.40 U 0. | MW-22D
09/17/02
0.30 U
82
NA
0.20 U
0.90 U
0.40 U
0.30 U | MW-22D
03/04/03
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0.40 U
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MW-22S
0.31 G/66
0.30 U
0.30 U
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0.30 U
0.30 U
0.30 U
0.30 U | MW-22D 10/09/03 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.20 U 0.50 U 0.20 U 0.20 U 0.50 U 0.40 U 0.40 U 0.40 U | MW-22D 03/18/04 0.30 U 0.30 U 0.30 U NA 0.20 U 0.30 U 0.30 U NA 0.80 U 0.30 U 0.80 U 0.70 N 0.70 N 0.80 U 0.70 N 0.80 U 0.70 N 0.80 U 0.70 N 0.80 U | MW-22D 10/11/04 0.30 U 0.40 U 0.40 U 0.30 U 0.40 U 0.30 U 0.40 U | MW-22D 03/22/05 0.30 U 0.40 U 0.40 U 0.30 U 0.40 U 0.30 U 0.40 U | MW-22D
09/23/05
03/0 U
0.30 U
0.30 U
0.50 U
0.50 U
0.50 U
0.40 U
0.40 U
0.30 U
0.30 U
0.30 U
0.40 U
0.40 U
0.30 U
0.50 U
0.50 U
0.40 U
0.50 U | MW-22D
03/16/06
0.30 U
1.3
NA
0.560 U
0.40 U
0.40 U
NA
0.30 U
0.30 U
0.30 U
0.40 U
NA
0.50 U
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0.50 U
0. | MW-22D 06/22/06 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U MW-23 12/19/02 1.4 U 700 2.4 U 1.2 U 4.4 U 1.2 U 0.60 U | MW-22D 05/03/11 1.0 U 1. | MW-22D
11/20/14
1.0 U
1.0 U
1. | MW-22D 06/04/15 1.0 U 4.0 U 1.0 U 1. | MW-22D
11/16/15
1.0 U
1.0 U |
| Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chloroethane Chloroethane Chloroethane Chloroethene Trichloroethene Trichloroethene ics-1,2-Dichloroethene ics-1,2-Dichloroethane Volatile Organics 1,1,2-Trichloroethane Chloroethane Chloroethane Chloroethane Chloroethane Chloroethane Trichloroethene Trichloroethene Trichloroethene Trichloroethene Trichloroethene Trichloroethene Trichloroethene | \$ CAO Goal 5 5 5 5 5 5 5 5 5 | Location ID: Sample Date: Units ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L | MW-20D2 03/16/06 0.30 U 0.30 U NA 0.50 U 0.40 U 0.40 U NA 0.30 U 0.40 U NA | MW-20D2 06/22/06 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U | MW-20S 08/07/00 0.30 U 13 NA 0.20 U 0.30 U 0.30 U 14 0.80 U 0.30 U 0.40 U NA 0.60 U 0.70 U MW-22D 11/20/18 1.0 U | MW-21 08/08/00 0.30 U 0.20 U NA 0.20 U 0.30 U 0.30 U 0.40 U NA 0.60 U 0.70 U 0. | MW-21 11/16/01 0.20 U 0.20 U NA 0.20 U 1.0 U 0.30 U 0.30 U 0.30 U 0.20 U 0.20 U 0.30 U 0.10 U | MW-21 12/19/01 0.20 U 0.20 U NA 0.20 U 1.0 U 0.30 U 0.30 U 0.20 U 0.20 U 1.0 U 0.30 U 0.30 U 0.20 U 1.0 U 0.20 U 1.0 U 0.30 U 0.20 U 1.0 U 0.59 J 1.0 U | MW-21 10/07/02 0.30 U 0.40 U NA 0.20 U 0.90 U 0.10 U NA 0.30 U 0.30 U 0.10 U | MW-21 03/03/03 0.30 U 0.40 U 0.50 U 0.20 U 0.20 U 0.30 U | MW-21
10/09/03
0.30 U
0.30 U
0.50 U
0.50 U
0.20 U
0.30 U
0.20 U
0.20 U
0.20 U
0.20 U
0.30 U
0.20 U
0.20 U
0.20 U
0.30 U
0.20 U
0.20 U
0.30 U
0 | MW-21 03/18/04 0.30 U 0.30 U 0.30 U NA 0.20 U 0.30 U 0.30 U 0.30 U 0.30 U 0.20 U NA 0.20 U 0.30 U | MW-21 10/11/04 0.30 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U 0.40 U 0.40 U 0.40 U 0.40 U 0.20 U MW-22S 12/19/01 0.20 U 0.20 U 0.30 U | MW-21 03/23/05 0.30 U 0.40 U 0.40 U 0.40 U 0.30 U 0.40 U NA | MW-21 09/22/05 0.30 U 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U 0.30 U 0.40 U 0.40 U 0.30 U 0.30 U 0.40 U 0.40 U 0.30 U 0.30 U 0.40 U 0.40 U 0.30 U 0.30 U | MW-21 03/16/06 0.30 U 0.30 U 0.30 U NA 0.50 U 0.40 U 0.40 U NA 0.30 U | MW-21 06/22/06 0.30 U 0.30 U 0.30 U 0.20 U 0.50 U 0.50 U 0.40 U 0.40 U 0.40 U 0.30 U | MW-22D 11/15/01 0.20 U 0.20 U 0.20 U NA 0.20 U 1.0 U 0.30 U 0.30 U 0.30 U 0.20 U 0.30 U 0.40 U | MW-22D 12/19/01 0.20 U 0.20 U 0.20 U 0.20 U 0.20 U 1.0 U 0.30 U 0.30 U 0.20 U 0.40 U 0 | MW-22D
0917702
0.30 U
82
NA
0.20 U
0.20 U
0.20 U
0.30 U | MW-22D 03/04/03 0.30 U 0.40 U 0.50 U 0.20 U 0.20 U 0.20 U 0.30 U | MW-22D
10/09/03
0.30 U
0.30 U
0.50 U
0.20 U
0.30 U
0.20 U
0.20 U
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0.20 U
0.50 U | MW-22D 03/18/04 0.30 U 0.30 U 0.30 U NA 0.20 U 0.30 U 0.30 U 0.30 U 0.30 U 0.20 U 0.20 U 0.20 U 0.50 U 0.50 U 0.50 U 0.50 U 0.50 U 0.70 U 0.70 U 0.70 U 0.70 U 0.70 U 0.80 U 0.80 U 0.80 U 0.80 U 0.80 U 0.80 U | MW-22D 10/11/04 0.30 U 0.40 U 0.40 U 0.30 U 0.40 U 0.30 U 0.40 U 0.30 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.20 U MW-23 11/20/01 2.0 U 920 NA 1.9 U 10 U 2.6 U 3.1 U NA | MW-22D 03/22/05 0.30 U 0.40 U 0.40 U 0.30 U 0.40 U 0.30 U 0.40 U 0.50 U | MW-22D
09/23/05
0 30 U
0 30 U
0 50 U
0 50 U
0 40 U
0 40 U
0 40 U
0 30 U
0 40 U
0 30 U
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | MW-22D 03/16/06/06 03/16/06/06 03/16/06/06 03/16/06/06 03/16/06/06 03/16/06/06 03/16/06/06 03/16/06/06 03/16/06/06 03/16/06/06 03/16/06/06 03/16/06/06 03/16/06/06/06/06/06/06/06/06/06/06/06/06/06 | MW-22D 06/22/06 0.30 U 0.30 U 0.30 U 0.50 U 0.50 U 0.50 U 0.40 U 0.40 U 0.30 U 0.30 U 0.30 U 0.40 U 0.60 U 0.60 U 0.60 U 0.60 U 0.60 U | MW-22D 05/03/11 1.0 U 1 | MW-22D 11/20/14 1.0 U | MW-22D 06/04/15 1.0 U 1. | MW-22D
11/16/15
1.0 U
1.0 U |



				1	1		1			1	,		1		1											1					
		Location ID:	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23 (6.3)	MW-23 (-0.7)	MW-23 (6.3)	MW-23 (-0.7)	MW-23 (6.3)	MW-23 (-0.7)	MW-23 (6.3)	MW-23 (-0.7)	MW-23 (6.3)	MW-23 (-0.7)	MW-23 (6.3)	MW-23 (-0.7)	MW-23 (6.3)	MW-23 (-0.7)	MW-23 (6.3)	MW-23 (-0.7)	MW-23 (6.3)	MW-23 (-0.7)	MW-23 (40)	MW-23 (47)	MW-24
	8	Sample Date:	03/23/05	09/22/05	03/16/06	06/22/06	01/03/08	01/03/08	05/02/11	05/02/11	11/20/14	11/20/14	06/04/15	06/04/15	11/16/15	11/16/15	10/04/16	10/04/16	10/03/17	10/03/17	11/20/18	11/20/18	09/20/19	09/20/19	10/08/20	10/08/20	9/15/2021	9/15/2021	09/15/22	09/15/22	12/07/06
Volatile Organics	CAO Goal ¹	Units																													
1,1,2-Trichloroethane	5	ug/L	1.4 U	1.6 U	1.6 U	1.6 U	0.40 U	0.40 U	12 U	12 U	1.0 U	1.0 U	3.0 U	3.0 U	0.094 J	1.0 U	5.0 U	5.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U
1,2-Dichloroethane	5	ug/L	490	580	490	450	300	310	280	280	94	56	55	55	24	28	17	27	17	18	61	15	18	19	13	27	13	14	11	9.5	0.30 U
Chloroethane		ug/L	1.8 U	3.1	NA	1.2 U	0.90 U	0.90 U	12 U	12 U	1.1	1.3	3.0 U	0.97 J	1.1	1.1	NA	NA	1.0 U	0.92 J	2.5 U	1.0 U	1.0 U	0.95 J	NA	1.0 U	1.0 U	1.0 U	2.0	3.0	0.40 U
Chloroform	0.19	ug/L	1.7 U	2.6 U	2.6 U	2.6 U	0.40 U	0.40 U	12 U	12 U	1.0 U	1.0 U	3.0 U	3.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.90
Methylene Chloride Tetrachloroethene	5	ug/L ug/l	4.6 U	2.6 U 2.2 U	2.6 U 2.2 U	2.6 U 2.2 U	0.80 U 0.80 U	0.80 U 0.80 U	8.4 J 12 U	12 U	1.0 U	1.0 U	3.0 U 3.0 U	3.0 U 3.0 U	1.0 U	1.0 U 1.0 U	5.0 U	5.0 U	1.0 U NA	1.0 U NA	2.5 U 2.5 U	1.0 U	1.0 U NA	1.0 U NA	1.0 U	1.0 U	1.0 U NA	1.0 U	1.0 U	1.0 U 1.0 U	0.40 U 0.40 U
Trichloroethene	5	ug/L ug/L	2.0 U	1.8 U	1.8 U	1.8 U	0.70 U	0.70 U	12 U	12 U	0.38 J	0.39 J	0.53 J	0.55 J	0.58 J	0.58 J	0.50 J	1.0 U	1011	1.0 U	2.5 U	1.0 U	1.011	1011	1.0 U	1.0 U	1.0 U	1.0 U	1.00	1.00	0.40 U
cis-1,2-Dichloroethene		ug/L	1.8 U	2.2 U	NA NA	2.2 U	0.80	0.60 U	12 U	12 U	0.58 J	0.66 J	3.0 U	0.83.1	0.77 J	0.79 J	NA	NA NA	0.74.1	0.78 J	2.5 U	1.0 U	0.87 J	0.83.1	1.0 U	0.90 J	1.0 U	1.0 U	0.86 J	0.89 J	0.40 U
Vinyl Chloride	2	ug/L	1.8 U	3.8	1.4 U	2.9	1.8	1.6	12 U	12 U	0.91 J	0.52 J	3.0 U	3.0 U	0.33 J	0.53 J	1.0 U	1.0 U	1.0 U	1.0 U	2.5 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.20 U
Carbon Disulfide	1000	ug/L	1.2 U	1.7 U	1.7 U	2.7 U	0.90 U	0.90 U	12 U	12 U	1.0 U	1.0 U	3.0 U	3.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	NA	2.5 U	1.0 U	NA	NA	NA	NA	NA	NA	1.0 U	1.0 U	0.40 U
		Location ID:	MW-24	MW-25	MW-25	MW-25	MW-25I	MW-25I	MW-25I	MW-25I	MW-25I	MW-25I	MW-25I	MW-25I	MW-25I	MW-25I	MW-25I	MW-25I	MW-25I	MW-26	MW-26	MW-26	MW-26	MW-27	MW-27	MW-27	MW-27	MW-27	MW-27	MW-27	MW-27
	8	Sample Date:	05/02/11	12/07/06	01/03/08	05/02/11	01/03/08	01/03/08	05/02/11	11/20/14	06/04/15	11/16/15	10/04/16	10/03/17	11/20/18	09/20/19	10/08/20	9/14/2021	09/14/22	12/07/06	01/03/08	01/03/08	05/03/11	12/07/06	01/03/08	01/03/08	05/02/11	11/20/14	06/04/15	11/16/15	10/05/16
Volatile Organics	CAO Goal ¹	Units																													
1,1,2-Trichloroethane	5	ug/L	1.0 U	9.2 [7.8]	8.0	5.4 J	2.5	2.9	1.0	1.3	1.3	1.5	1.4 J	2.0 U	0.84 J	1.1	1.0 U	1.0 U	0.61 J	0.40 U	0.20 U	0.40 U	3.0 U	22 U	16	23	500 U [500 U]	8.6 J	400 U	8.8 J	5.1
1,2-Dichloroethane	5	ug/L	1.0 U	1,300 [1,200]	850	630	170	170	6.2	56	41	51	53	50	13	25	18	2.7 J	2.0	53	84	34	65	12,000	8,700	11,000	8,700 [8,800]	6,600	5,900	5,000	690
Chloroethane		ug/L	1.0 U	4.3 U [4.3 U]		25 U	0.40 U	0.40 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.90 U	0.40 U	0.90 U	3.0 U	43 U	32	43 U	500 U [500 U]	29	400 U	26 J	NA
Chloroform	0.19	ug/L	1.0 U	7.6 [6.5]	6.6	25 U	12	11	3.7	2.8	1.9	1.9	1.9	1.3 J	1.1	0.90 J	1.0 U	1.0 U	0.76 J	9.1	1.7	2.7	3.0 U	20 U	10 U	20 U	500 U [500 U]	25 U	400 U	50 U	1.0 U
Methylene Chloride	5	ug/L	1.0 U	4.0 U [4.0 U]		25 U	0.60	0.60	1.3 U	1.0 U	1.0 U	1.0 U	5.0 U	2.0 UB	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.80 U	0.40 U	0.80 U	3.0 U	40 U	20 U	40 U	220 JB [180 J]	25 U	400 U	50 U	5.0 U
Tetrachloroethene	5	ug/L	1.0 U	4.2 U [4.2 U]	4.2 U	25 U	1.1	1.3	0 J	0.58 J	0.58 J	0.69 J	0.75 J	NA.	0.56 J	NA 00	1.0 U	NA 1.7.J	0.67 J	0.80 U	0.40 U	0.80 U	3.0 U	42 U	21 U	42 U 36 U	500 U [500 U]	25 U	400 U	50 U	1.0 U
Trichloroethene cis-1.2-Dichloroethene	5	ug/L ug/l	1.0 U	42 [36] 6.9 [7.2]	9.1	7.3 J	1.9	2.1	0.55 J	2.8	3.0	23 4.4	NA NA	22 J 4.7	1.5	3.5	2.9	1.7 J	6.1 1.0 U	220 78	190 54	170 55	47	28 U	32 14 U	28 U	500 U [500 U] 500 U [500 U]	10 J 6.4 J	400 U 400 U	13 J 50 U	10 NA
		-9-																						20 0	140						
Vinyl Chloride	2	ug/L	1.0 U	5.1 [4.2]	3.5	25 U	0.70	0.60	1.0 U	1.0 U	1.0 U	0.26 J	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	6.2	5.4	3.3	4.9	78	46	52	500 U [500 U]	6.8 J	400 U	9.4 J	5.6
Carbon Disulfide	1000	ug/L	1.0 U	4.4 U [4.4 U]	4.4 U	25 U	0.40 U	0.40 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	NA	1.0 U	NA	NA	NA	1.0 U	0.90 U	0.40 U	0.90 U	3.0 U	44 U	22 U	44 U	500 U [500 U]	25 U	400 U	50 U	1.0 U
Carbon Disulfide	•										1																,				
Carbon Disulfide		Location ID:	MW-27	MW-27	MW-27	MW-27	MW-27	MW-27	MW-28D	MW-28D	MW-28D	MW-28D	MW-28D	MW-28D	MW-28D	MW-28D	MW-28D	MW-28D	MW-28D	MWBR-1	MWBR-1	MWBR-1	MWBR-1	MWBR-1	MWBR-1	MWBR-1	MWBR-1	MWBR-1	MWBR-1	MWBR-1	MW-23
	5	Location ID: Sample Date:	MW-27								1																,				
Volatile Organics		Location ID: Sample Date: Units	MW-27	MW-27	MW-27	MW-27 10/08/20	MW-27 09/15/21	MW-27 09/15/22	MW-28D	MW-28D 11/20/14	MW-28D 06/04/15	MW-28D	MW-28D	MW-28D 10/03/17	MW-28D	MW-28D 09/20/19	MW-28D 10/08/20	MW-28D 09/14/21	MW-28D	MWBR-1	MWBR-1	MWBR-1	MWBR-1 11/15/01	MWBR-1 12/19/01	MWBR-1	MWBR-1 10/09/03	MWBR-1	MWBR-1	MWBR-1	MWBR-1	MW-23 09/22/05
Volatile Organics 1,1,2-Trichloroethane	5	Location ID: Sample Date:	MW-27 10/03/17	MW-27 11/20/18	MW-27 09/20/19	MW-27	MW-27	MW-27	MW-28D 05/02/11 250 U	MW-28D	MW-28D	MW-28D 11/16/15	MW-28D 10/04/16	MW-28D	MW-28D 11/20/18	MW-28D 09/20/19	MW-28D	MW-28D	MW-28D 09/14/22	MWBR-1 09/24/98	MWBR-1 01/12/99	MWBR-1 04/12/99	MWBR-1	MWBR-1	MWBR-1 03/03/03	MWBR-1	MWBR-1 03/18/04	MWBR-1	MWBR-1	MWBR-1 03/23/05	MW-23
Volatile Organics	CAO Goal ¹	Location ID: Sample Date: Units ug/L	MW-27 10/03/17 2.9	MW-27 11/20/18	MW-27 09/20/19 4.1	MW-27 10/08/20	MW-27 09/15/21	MW-27 09/15/22	MW-28D 05/02/11	MW-28D 11/20/14	MW-28D 06/04/15	MW-28D 11/16/15	MW-28D 10/04/16	MW-28D 10/03/17 2.9	MW-28D 11/20/18	MW-28D 09/20/19	MW-28D 10/08/20	MW-28D 09/14/21	MW-28D 09/14/22 50 U	MWBR-1 09/24/98	MWBR-1 01/12/99	MWBR-1 04/12/99	MWBR-1 11/15/01 2.0 U	MWBR-1 12/19/01	MWBR-1 03/03/03	MWBR-1 10/09/03	MWBR-1 03/18/04	MWBR-1 08/23/04	MWBR-1 10/12/04 28	MWBR-1 03/23/05	MW-23 09/22/05
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane	CAO Goal ¹ 5 5	Location ID: Sample Date: Units ug/L ug/L	MW-27 10/03/17 2.9 43	MW-27 11/20/18 3.7 7.7	MW-27 09/20/19 4.1 13	MW-27 10/08/20 1.0 U	MW-27 09/15/21 1.0 U 1.0 UJ	MW-27 09/15/22 2.2 3.0	MW-28D 05/02/11 250 U 5,700	MW-28D 11/20/14 2.8 J 3,500	MW-28D 06/04/15 200 U 3,500	MW-28D 11/16/15 5.1 J 3,200	MW-28D 10/04/16 100 U 2,700	MW-28D 10/03/17 2.9	MW-28D 11/20/18 4.1 1,900 D	MW-28D 09/20/19 130 U 2,400 J	MW-28D 10/08/20 1.0 J 450 D	MW-28D 09/14/21 5.0 UJ 1,200 D	MW-28D 09/14/22 50 U 1,600	MWBR-1 09/24/98 8.0 3,400,000 D	MWBR-1 01/12/99 15 3,000 D	MWBR-1 04/12/99 18 U 5,600	MWBR-1 11/15/01 2.0 U 1,800	MWBR-1 12/19/01 0.20 U 60	MWBR-1 03/03/03 14 U 4,900	MWBR-1 10/09/03 23 7,500	MWBR-1 03/18/04 13 3,900	MWBR-1 08/23/04 35 8,400	MWBR-1 10/12/04 28 6,800	MWBR-1 03/23/05 14 U 6,300	MW-23 09/22/05 1.6 U 580
Volatile Organics 1.1.2-Trichloroethane 1.2-Dichloroethane Chloroethane	CAO Goal ¹ 5 5	Location ID: Sample Date: Units ug/L ug/L ug/L	MW-27 10/03/17 2.9 43 18	MW-27 11/20/18 3.7 7.7 9.9	MW-27 09/20/19 4.1 13 16	1.0 U 13 9.2 1.0 U 1.0 U	MW-27 09/15/21 1.0 U 1.0 UJ 1.0 U	MW-27 09/15/22 2.2 3.0 5.4	MW-28D 05/02/11 250 U 5,700 250 U	MW-28D 11/20/14 2.8 J 3,500 8.0 J	MW-28D 06/04/15 200 U 3,500 200 U	MW-28D 11/16/15 5.1 J 3,200 11 J	10/04/16 10/04/16 100 U 2,700 NA	MW-28D 10/03/17 2.9 2,000 D 8	MW-28D 11/20/18 4.1 1,900 D 4.3	MW-28D 09/20/19 130 U 2,400 J 130 U 130 U 130 U	MW-28D 10/08/20 1.0 J 450 D 10 U	MW-28D 09/14/21 5.0 UJ 1,200 D 5.0 U	MW-28D 09/14/22 50 U 1,600 50 U	MWBR-1 09/24/98 8.0 3,400,000 D NA 13,000 34	MWBR-1 01/12/99 15 3,000 D 10 U	MWBR-1 04/12/99 18 U 5,600 NA	MWBR-1 11/15/01 2.0 U 1,800 NA	MWBR-1 12/19/01 0.20 U 60 NA	MWBR-1 03/03/03 14 U 4,900 24 U 12 U 44 U	MWBR-1 10/09/03 23 7,500 23 U	MWBR-1 03/18/04 13 3,900 NA	MWBR-1 08/23/04 35 8,400 18 U	MWBR-1 10/12/04 28 6,800 18 U	MWBR-1 03/23/05 14 U 6,300 18 U	MW-23 09/22/05 1.6 U 580 3.1 2.6 U 2.6 U
Volatile Organics 1.1.2-Trichloroethane 1.2-Dichloroethane Chloroethane Chloroform Methylene Chloride Tetrachloroethene	CAO Goal ¹ 5 5	Location ID: Sample Date: Units ug/L ug/L ug/L	MW-27 10/03/17 2.9 43 18 2.0 U 2.0 UB NA	MW-27 11/20/18 3.7 7.7 9.9 1.0 U	MW-27 09/20/19 4.1 13 16 1.0 U	1.0 U 13 9.2 1.0 U 1.0 U 1.0 U	1.0 U 1.0 U 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ	2.2 3.0 5.4 1.0 U 1.0 U	MW-28D 05/02/11 250 U 5,700 250 U 250 U 250 U 250 U 250 U	MW-28D 11/20/14 2.8 J 3,500 8.0 J 1.2 J 10 U 10 U	MW-28D 06/04/15 200 U 3,500 200 U 200 U	MW-28D 11/16/15 5.1 J 3,200 11 J 20 U 20 U 20 U	10/04/16 10/04/16 100 U 2,700 NA 20 U 100 U 20 U	MW-28D 10/03/17 2.9 2,000 D 8 0.83 J	MW-28D 11/20/18 4.1 1,900 D 4.3 0.68 J 1.0 U 0.84 J	MW-28D 09/20/19 130 U 2,400 J 130 U 130 U NA	MW-28D 10/08/20 1.0 J 450 D 10 U 1.0 U J 1.0 U J 1.0 U J	MW-28D 09/14/21 5.0 UJ 1,200 D 5.0 U 5.0 U NA	MW-28D 09/14/22 50 U 1,600 50 U 50 U	MWBR-1 09/24/98 8.0 3,400,000 D NA 13,000 34 2.0 U	MWBR-1 01/12/99 15 3,000 D 10 U 5.0 U 5.0 U 5.0 U	MWBR-1 04/12/99 18 U 5,600 NA 30 U	2.0 U 1,800 NA 1.9 U	MWBR-1 12/19/01 0.20 U 60 NA 0.20 U 1.0 U 0.30 U	MWBR-1 03/03/03 14 U 4,900 24 U 12 U 44 U 12 U	MWBR-1 10/09/03 23 7,500 23 U 9.5 U 40 U 16 U	MWBR-1 03/18/04 13 3,900 NA 4.8 U 20 U 7.8 U	35 8,400 18 U 17 U 46 U 18 U	MWBR-1 10/12/04 28 6,800 18 U 17 U	MWBR-1 03/23/05 14 U 6,300 18 U 17 U 46 U 18 U	MW-23 09/22/05 1.6 U 580 3.1 2.6 U 2.6 U 2.2 U
Volatile Organics 11,2-Trichlorcethane 1.2-Dichlorcethane Chlorcethane Chlorofform Methylene Chloride Tetrachlorcethene Trichlorcethene	CAO Goal ¹ 5 5 5 0.19 5 5 5 5 5 5 5 5 6 7 7 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Location ID: Sample Date: Units ug/L ug/L ug/L	MW-27 10/03/17 2.9 43 18 2.0 U 2.0 UB NA 11 J	MW-27 11/20/18 3.7 7.7 9.9 1.0 U 1.0 U 8	MW-27 09/20/19 4.1 13 16 1.0 U 1.0 U NA 12	MW-27 10/08/20 1.0 U 13 9.2 1.0 U 1.0 U 1.0 U	MW-27 09/15/21 1.0 U 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ	MW-27 09/15/22 2.2 3.0 5.4 1.0 U 1.0 U 5.9	MW-28D 05/02/11 250 U 5,700 250 U 250 U 250 U 250 U 250 U	MW-28D 11/20/14 2.8 J 3,500 8.0 J 1.2 J 10 U 10 U	MW-28D 06/04/15 200 U 3,500 200 U 200 U 200 U 200 U 200 U	MW-28D 11/16/15 5.1 J 3,200 11 J 20 U 20 U 20 U 17 J	MW-28D 10/04/16 100 U 2,700 NA 20 U 100 U 20 U 15 J	MW-28D 10/03/17 2.9 2,000 D 8 0.83 J 0.40 J NA 19	MW-28D 11/20/18 4.1 1,900 D 4.3 0.68 J 1.0 U 0.84 J 14	MW-28D 09/20/19 130 U 2,400 J 130 U 130 U 130 U NA 130 U	MW-28D 10/08/20 1.0 J 450 D 10 U 1.0 U J 1.0 U J 2.7 J	MW-28D 09/14/21 5.0 UJ 1,200 D 5.0 U 5.0 UJ NA 5.0 UJ	50 U 1,600 50 U 50 U 50 U 50 U 50 U 50 U	MWBR-1 09/24/98 8.0 3,400,000 D NA 13,000 34 2.0 U 16,000	MWBR-1 01/12/99 15 3,000 D 10 U 5.0 U 5.0 U 5.0 U 42	MWBR-1 04/12/99 18 U 5,600 NA 30 U 56 U 31 U 22 U	MWBR-1 11/15/01 2.0 U 1,800 NA 1.9 U 10 U 2.8 U 30	MWBR-1 12/19/01 0.20 U 60 NA 0.20 U 1.0 U 0.30 U 1.2	MWBR-1 03/03/03 14 U 4,900 24 U 12 U 44 U 12 U 110	MWBR-1 10/09/03 23 7,500 23 U 9.5 U 40 U 16 U 290	MWBR-1 03/18/04 13 3,900 NA 4.8 U 20 U 7.8 U	35 8,400 18 U 17 U 46 U 18 U 330	MWBR-1 10/12/04 28 6,800 18 U 17 U 46 U 18 U 290	MWBR-1 03/23/05 14 U 6,300 18 U 17 U 46 U 18 U 230	MW-23 09/22/05 1.6 U 580 3.1 2.6 U 2.2 U 1.8 U
Volatile Organics 1.1.2-Trichloroethane 1.2-Dichloroethane Chloroethane Chloroethane Chloroethane Chloroethane Tetrachloroethene Trichloroethene Cis-1.2-Dichloroethene	CAO Goal ¹ 5 5 0.19 5	Location ID: Sample Date: Units ug/L ug/L ug/L	MW-27 10/03/17 2.9 43 18 2.0 U 2.0 UB NA 11 J 7.3	MW-27 11/20/18 3.7 7.7 9.9 1.0 U	MW-27 09/20/19 4.1 13 16 1.0 U 1.0 U	1.0 U 13 9.2 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 6.2 4.5	1.0 U 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ	MW-27 09/15/22 2.2 3.0 5.4 1.0 U 1.0 U 1.0 U 5.9 4.5	MW-28D 05/02/11 250 U 5,700 250 U 250 U 250 U 250 U 250 U 250 U 250 U	MW-28D 11/20/14 2.8 J 3,500 8.0 J 1.2 J 10 U 10 U	06/04/15 200 U 3,500 200 U 200 U 200 U 200 U 200 U 200 U 200 U	MW-28D 11/16/15 5.1 J 3,200 11 J 20 U 20 U 20 U	MW-28D 10/04/16 100 U 2,700 NA 20 U 100 U 20 U 15 J NA	MW-28D 10/03/17 2.9 2,000 D 8 0.83 J 0.40 J	MW-28D 11/20/18 4.1 1,900 D 4.3 0.68 J 1.0 U 0.84 J 14 5.3	MW-28D 09/20/19 130 U 2,400 J 130 U 130 U NA 130 U NA 130 U	MW-28D 10/08/20 1.0 J 450 D 10 U 1.0 U J 1.0 U J 2.7 J 1.8 J	MW-28D 09/14/21 5.0 UJ 1,200 D 5.0 U 5.0 U 5.0 UJ NA 5.0 UJ 5.0 UJ	MW-28D 09/14/22 50 U 1,600 50 U 50 U 50 U 50 U 50 U 50 U	8.0 8.0 3,400,000 D NA 13,000 34 2.0 U 16,000 NA	MWBR-1 01/12/99 15 3,000 D 10 U 5.0 U 5.0 U 5.0 U 42 NA	MWBR-1 04/12/99 18 U 5,600 NA 30 U 56 U 31 U 22 U NA	2.0 U 1,800 NA 1.9 U 10 U 2.8 U NA	MWBR-1 12/19/01 0.20 U 60 NA 0.20 U 1.0 U 0.30 U 1.2 NA	MWBR-1 03/03/03 14 U 4,900 24 U 12 U 44 U 12 U 110 16 U	MWBR-1 10/09/03 23 7,500 23 U 9.5 U 40 U 16 U 290 68	13 3,900 NA 4.8 U 20 U 7.8 U 140 NA	MWBR-1 08/23/04 35 8,400 18 U 17 U 46 U 18 U 330 65	MWBR-1 10/12/04 28 6,800 18 U 17 U 46 U 18 U 290 54	MWBR-1 03/23/05 14 U 6,300 18 U 17 U 46 U 18 U 230 94	MW-23 09/22/05 1.6 U 580 3.1 2.6 U 2.6 U 2.2 U 1.8 U 2.2 U
Volatile Organics 11,2-Trichloroethane 1,2-Dichloroethane Chlorotform Methylene Chloride Tortachloroethane Trichloroethane Cibirotform Methylene Chloride Tortachloroethane Cibi-1,2-Dichloroethane Cibi-1,2-Dichloroethane	CAO Goal* 5 5 0.19 5 5 2	Location ID: Sample Date: Units ug/L ug/L ug/L	MW-27 10/03/17 2.9 43 18 2.0 U 2.0 U NA 11 J 7.3 7.9	MW-27 11/20/18 3.7 7.7 9.9 1.0 U 1.0 U 1.0 U 8 5.3 5.2	MW-27 09/20/19 4.1 13 16 1.0 U 1.0 U NA 12 7.3	1.0 U 13 9.2 1.0 U 1.0 U 1.0 U 1.0 U 6.2 4.5	1.0 U 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ	9/15/22 2.2 3.0 5.4 1.0 U 1.0 U 5.9 4.5 5.7	MW-28D 05/02/11 250 U 5,700 250 U 250 U 250 U 250 U 250 U 250 U 250 U 250 U 250 U	MW-28D 11/20/14 2.8 J 3,500 8.0 J 1.2 J 10 U 10 U 15 6.9 J 25	06/04/15 200 U 3,500 200 U 200 U 200 U 200 U 200 U 200 U 200 U 200 U 200 U 200 U	MW-28D 11/16/15 5.1 J 3,200 11 J 20 U 20 U 20 U 17 J 8.0 J 21	MW-28D 10/04/16 100 U 2,700 NA 20 U 100 U 20 U 15 J NA 14 J	MW-28D 10/03/17 2.9 2,000 D 8 0.83 J 0.40 J NA 19 6.9 18	MW-28D 11/20/18 4.1 1,900 D 4.3 0.88 J 1.0 U 0.84 J 14 5.3 8.5	MW-28D 09/20/19 130 U 2,400 J 130 U 130 U NA 130 U 130 U 130 U 130 U	MW-28D 10/08/20 1.0 J 450 D 10 U 1.0 U J 1.0 U J 2.7 J 1.8 J 2.6 J	MW-28D 09/14/21 5.0 UJ 1,200 D 5.0 U 5.0 UJ NA 5.0 UJ 5.0 UJ 5.0 UJ 5.0 UJ	MW-28D 09/14/22 50 U 1,600 50 U 50 U 50 U 50 U 50 U 50 U 50 U 50	MWBR-1 09/24/98 8.0 3,400,000 D NA 13,000 34 2.0 U 16,000 NA 2.0 U	MWBR-1 01/12/99 15 3,000 D 10 U 5.0 U 5.0 U 42 NA 10	MWBR-1 04/12/99 18 U 5,600 NA 30 U 56 U 31 U 22 U NA 36 U	MWBR-1 11/15/01 2.0 U 1.800 NA 1.9 U 2.8 U 30 NA 9.3	MWBR-1 12/19/01 0.20 U 60 NA 0.20 U 1.0 U 0.30 U 1.2 NA 0.20 U	MWBR-1 03/03/03 14 U 4,900 24 U 12 U 44 U 12 U 110 16 U 14 U	MWBR-1 10/09/03 23 7,500 23 U 9.5 U 40 U 16 U 290 68 26 U	MWBR-1 03/18/04 13 3,900 NA 4.8 U 20 U 7.8 U 140 NA	35 8,400 18 U 17 U 46 U 18 U 330 65 18 U	28 6,800 18 U 17 U 46 U 18 U 290 54	MWBR-1 03/23/05 14 U 6,300 18 U 17 U 46 U 18 U 230 94	MW-23 09/22/05 1.6 U 580 3.1 2.6 U 2.6 U 2.2 U 1.8 U 2.2 U 3.8
Volatile Organics 1.1.2-Trichloroethane 1.2-Dichloroethane Chloroethane Chloroethane Chloroethane Chloroethane Tetrachloroethene Trichloroethene Cis-1.2-Dichloroethene	CAO Goal ¹ 5 5 5 0.19 5 5 5 5 5 5 5 5 6 7 7 8 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Location ID: Sample Date: Units ug/L ug/L ug/L	MW-27 10/03/17 2.9 43 18 2.0 U 2.0 UB NA 11 J 7.3	MW-27 11/20/18 3.7 7.7 9.9 1.0 U 1.0 U 8	MW-27 09/20/19 4.1 13 16 1.0 U 1.0 U NA 12	1.0 U 13 9.2 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 6.2 4.5	1.0 U 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ	MW-27 09/15/22 2.2 3.0 5.4 1.0 U 1.0 U 1.0 U 5.9 4.5	MW-28D 05/02/11 250 U 5,700 250 U 250 U 250 U 250 U 250 U 250 U 250 U	MW-28D 11/20/14 2.8 J 3,500 8.0 J 1.2 J 10 U 10 U	06/04/15 200 U 3,500 200 U 200 U 200 U 200 U 200 U 200 U 200 U	MW-28D 11/16/15 5.1 J 3,200 11 J 20 U 20 U 20 U 17 J	MW-28D 10/04/16 100 U 2,700 NA 20 U 100 U 20 U 15 J NA	MW-28D 10/03/17 2.9 2,000 D 8 0.83 J 0.40 J NA 19	MW-28D 11/20/18 4.1 1,900 D 4.3 0.68 J 1.0 U 0.84 J 14 5.3	MW-28D 09/20/19 130 U 2,400 J 130 U 130 U NA 130 U NA 130 U	MW-28D 10/08/20 1.0 J 450 D 10 U 1.0 U J 1.0 U J 2.7 J 1.8 J	MW-28D 09/14/21 5.0 UJ 1,200 D 5.0 U 5.0 U 5.0 UJ NA 5.0 UJ 5.0 UJ	MW-28D 09/14/22 50 U 1,600 50 U 50 U 50 U 50 U 50 U 50 U	8.0 8.0 3,400,000 D NA 13,000 34 2.0 U 16,000 NA	MWBR-1 01/12/99 15 3,000 D 10 U 5.0 U 5.0 U 5.0 U 42 NA	MWBR-1 04/12/99 18 U 5,600 NA 30 U 56 U 31 U 22 U NA	2.0 U 1,800 NA 1.9 U 10 U 2.8 U NA	MWBR-1 12/19/01 0.20 U 60 NA 0.20 U 1.0 U 0.30 U 1.2 NA	MWBR-1 03/03/03 14 U 4,900 24 U 12 U 44 U 12 U 110 16 U	MWBR-1 10/09/03 23 7,500 23 U 9.5 U 40 U 16 U 290 68	13 3,900 NA 4.8 U 20 U 7.8 U 140 NA	MWBR-1 08/23/04 35 8,400 18 U 17 U 46 U 18 U 330 65	MWBR-1 10/12/04 28 6,800 18 U 17 U 46 U 18 U 290 54	MWBR-1 03/23/05 14 U 6,300 18 U 17 U 46 U 18 U 230 94	MW-23 09/22/05 1.6 U 580 3.1 2.6 U 2.6 U 2.2 U 1.8 U 2.2 U
Volatile Organics 11,2-Trichloroethane 1,2-Dichloroethane Chlorotform Methylene Chloride Tortachloroethane Trichloroethane Cibirotform Methylene Chloride Tortachloroethane Cibi-1,2-Dichloroethane Cibi-1,2-Dichloroethane	CAO Goal ¹ 5 5 5 0.19 5 5 5 2 1000	Location ID: Sample Date: Units ug/L ug/L ug/L	MW-27 10/03/17 2.9 43 18 2.0 U 2.0 U NA 11 J 7.3 7.9	MW-27 11/20/18 3.7 7.7 9.9 1.0 U 1.0 U 1.0 U 8 5.3 5.2	MW-27 09/20/19 4.1 13 16 1.0 U 1.0 U NA 12 7.3	1.0 U 13 9.2 1.0 U 1.0 U 1.0 U 1.0 U 6.2 4.5	1.0 U 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ	9/15/22 2.2 3.0 5.4 1.0 U 1.0 U 5.9 4.5 5.7	MW-28D 05/02/11 250 U 5,700 250 U 250 U 250 U 250 U 250 U 250 U 250 U 250 U 250 U	MW-28D 11/20/14 2.8 J 3,500 8.0 J 1.2 J 10 U 10 U 15 6.9 J 25	06/04/15 200 U 3,500 200 U 200 U 200 U 200 U 200 U 200 U 200 U 200 U 200 U 200 U	MW-28D 11/16/15 5.1 J 3,200 11 J 20 U 20 U 20 U 17 J 8.0 J 21	MW-28D 10/04/16 100 U 2,700 NA 20 U 100 U 20 U 15 J NA 14 J	MW-28D 10/03/17 2.9 2,000 D 8 0.83 J 0.40 J NA 19 6.9 18	MW-28D 11/20/18 4.1 1,900 D 4.3 0.88 J 1.0 U 0.84 J 14 5.3 8.5	MW-28D 09/20/19 130 U 2,400 J 130 U 130 U NA 130 U 130 U 130 U 130 U	MW-28D 10/08/20 1.0 J 450 D 10 U 1.0 U J 1.0 U J 2.7 J 1.8 J 2.6 J	MW-28D 09/14/21 5.0 UJ 1,200 D 5.0 U 5.0 UJ NA 5.0 UJ 5.0 UJ 5.0 UJ 5.0 UJ	MW-28D 09/14/22 50 U 1,600 50 U 50 U 50 U 50 U 50 U 50 U 50 U 50	MWBR-1 09/24/98 8.0 3,400,000 D NA 13,000 34 2.0 U 16,000 NA 2.0 U	MWBR-1 01/12/99 15 3,000 D 10 U 5.0 U 5.0 U 42 NA 10	MWBR-1 04/12/99 18 U 5,600 NA 30 U 56 U 31 U 22 U NA 36 U	MWBR-1 11/15/01 2.0 U 1.800 NA 1.9 U 2.8 U 30 NA 9.3	MWBR-1 12/19/01 0.20 U 60 NA 0.20 U 1.0 U 0.30 U 1.2 NA 0.20 U	MWBR-1 03/03/03 14 U 4,900 24 U 12 U 44 U 12 U 110 16 U 14 U	MWBR-1 10/09/03 23 7,500 23 U 9.5 U 40 U 16 U 290 68 26 U	MWBR-1 03/18/04 13 3,900 NA 4.8 U 20 U 7.8 U 140 NA	35 8,400 18 U 17 U 46 U 18 U 330 65 18 U	28 6,800 18 U 17 U 46 U 18 U 290 54	MWBR-1 03/23/05 14 U 6,300 18 U 17 U 46 U 18 U 230 94	MW-23 09/22/05 1.6 U 580 3.1 2.6 U 2.6 U 2.2 U 1.8 U 2.2 U 3.8
Volatile Organics 11,2-Trichloroethane 1,2-Dichloroethane Chlorotform Methylene Chloride Tortachloroethane Trichloroethane Cibirotform Methylene Chloride Tortachloroethane Cibi-1,2-Dichloroethane Cibi-1,2-Dichloroethane	CAO Goal ¹ 5 5 5 5 0.19 5 5 5 5 2 1000	Location ID: Sample Date: Units ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	MW-27 10/03/17 2.9 43 18 2.0 U 2.0 UB NA 11 J 7.3 7.9 NA	MW-27 11/20/18 3.7 7.7 9.9 1.0 U 1.0 U 1.0 U 8 5.3 5.2 1.0 U	MW-27 09/20/19 4.1 13 16 1.0 U NA 12 7.3 13 NA	MW-27 10/08/20 1.0 U 13 9.2 1.0 U 1.0 U 6.2 4.5 5.9 NA	MW-27 09/15/21 1.0 U 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ NA	MW-27 09/15/22 2.2 3.0 5.4 1.0 U 1.0 U 5.9 4.5 5.7	MW-28D 05/02/11 250 U 5,700 250 U 250 U	MW-28D 11/20/14 2.8 J 3.500 8.0 J 1.2 J 10 U 10 U 15 6.9 J 25 10 UJ	MW-28D 06/04/15 200 U 3,500 200 U 200 U 200 U 200 U 200 U 200 U 200 U 200 U	MW-28D 11/16/15 5.1 J 3.200 11 J 20 U 20 U 17 J 8.0 J 21 20 U	MW-28D 10/04/16 100 U 2,700 NA 20 U 100 U 20 U 15 J NA 14 J 20 U	MW-28D 10/03/17 2.9 2,000 D 8 0.83 J 0.40 J NA 19 6.9 18 NA	MW-28D 11/20/18 4.1 1,900 D 4.3 0.68 J 1,0 U 0.84 J 14 5.3 8.5 1.0 U	MW-28D 09/20/19 130 U 2,400 J 130 U 130 U NA 130 U 130 U 130 U NA	MW-28D 10/08/20 1.0 J 450 D 10 U 1.0 U J 1.0 U J 1.0 U J 2.7 J 1.8 J 2.6 J NA	MW-28D 09/14/21 5.0 UJ 1,200 D 5.0 U 5.0 UJ NA 5.0 UJ 5.0 UJ 5.0 UJ NA	MW-28D 09/14/22 50 U 1,600 50 U 50 U 50 U 50 U 50 U 50 U 50 U 50	MWBR-1 09/24/98 8.0 3,400,000 D NA 13,000 34 2.0 U 16,000 NA 2.0 U 2,000 U	MWBR-1 01/12/99 15 3,000 D 10 U 5.0 U 5.0 U 5.0 U 42 NA 10 5.0 U	MWBR-1 04/12/99 18 U 5,600 NA 30 U 56 U 31 U 22 U NA 36 U 28 U	MWBR-1 11/15/01 2.0 U 1,800 NA 1,9 U 10 U 2.8 U 30 NA 9.3 2.5 U	MWBR-1 12/19/01 0.20 U 60 NA 0.20 U 1.0 U 0.30 U 1.2 NA 0.20 U 0.20 U	MWBR-1 03/03/03 14 U 4,900 24 U 12 U 44 U 12 U 110 16 U 14 U 15 U	MWBR-1 10/09/03 23 7,500 23 U 9,5 U 40 U 16 U 290 68 26 U 12 U	MWBR-1 03/18/04 13 3,900 NA 4.8 U 20 U 7.8 U 140 NA 13 U 6.0 U	MWBR-1 08/23/04 35 8,400 18 U 17 U 46 U 18 U 330 65 18 U 12 U	28 6,800 18 U 17 U 46 U 18 U 290 54 18 U 12 U	MWBR-1 03/23/05 14 U 6,300 18 U 17 U 46 U 18 U 230 94 18 U	MW-23 09/22/05 1.6 U 580 3.1 2.6 U 2.2 U 1.8 U 2.2 U 1.8 U 3.8 1.7 U
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chioroethane Chioroethane Chioroethane Chioroethane Chioroethane Trichloroethene Trichloroethene Inchloroethene Gail 2-Dichloroethene Cathon Dauffide	CAO Goal ¹ 5 5 5 5 5 5 5 5 10.19 5 5 5 10.019 5 5 5 5 5 10.000	Location ID: sample Date: Units ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	MW-27 10/03/17 2.9 43 18 2.0 U 2.0 UB NA 11 J 7.3 7.9 NA	MW-27 11/20/18 3.7 7.7 9.9 1.0 U 1.0 U 1.0 U 8 5.3 5.2 1.0 U	MW-27 09/20/19 4.1 13 16 1.0 U 1.0 U NA 12 7.3 13 NA	MW-27 10/08/20 1.0 U 13 9.2 1.0 U 1.0 U 6.2 4.5 5.9 NA	MW-27 09/15/21 1.0 U 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ NA	MW-27 09/15/22 2.2 3.0 5.4 1.0 U 1.0 U 5.9 4.5 5.7 1.0 U	MW-28D 05/02/11 250 U 5,700 250 U MWBR-1	MW-28D 11/20/14 2.8 J 3,500 8.0 J 1.2 J 10 U 15 6.9 J 25 10 UJ MWBR-1	MW-28D 06/04/15 200 U 3,500 200 U 200 U 200 U 200 U 200 U 200 U 200 U 200 U 200 U	MW-28D 11/16/15 5.1 J 3,200 11 J 20 U 20 U 20 U 17 J 8.0 J 21 20 U	MW-28D 10/04/16 100 U 2,700 NA 20 U 100 U 20 U 15 J NA 14 J 20 U	MW-28D 10/03/17 2.9 2,000 D 8 0.83 J 0.40 J NA 19 6.9 18 NA	MW-28D 11/20/18 4.1 1,900 D 4.3 0.68 J 1.0 U 0.84 J 14 5.3 8.5 1.0 U	MW-28D 09/20/19 130 U 2,400 J 130 U 130 U 130 U NA 130 U 130 U NA 130 U NA	MW-28D 10/08/20 1.0 J 450 D 10 U 1.0 U J 1.0 U J 2.7 J 1.8 J 2.6 J NA	MW-28D 09/14/21 5.0 UJ 1,200 D 5.0 U 5.0 UJ NA 5.0 UJ S.0 UJ NA 5.0 UJ NA WBR-2	MW-28D 09/14/22 50 U 1,600 50 U 50 U 50 U 50 U 50 U 50 U 50 U 50	MWBR-1 09/24/98 8.0 3,400,000 D NA 13,000 34 2.0 U 16,000 NA 2.0 U 2,000 U	MWBR-1 01/12/99 15 3,000 D 10 U 5.0 U 5.0 U 42 NA 10 5.0 U	MWBR-1 04/12/99 18 U 5,600 NA 30 U 56 U 31 U 22 U NA 36 U 28 U MWBR-2	MWBR-1 11/15/01 2.0 U 1,800 NA 1.9 U 10 U 2.8 U 30 NA 9.3 2.5 U	MWBR-1 12/19/01 0.20 U 60 NA 0.20 U 1.0 U 0.30 U 1.2 NA 0.20 U 0.20 U 0.20 U	MWBR-1 03/03/03 14 U 4,900 24 U 12 U 44 U 12 U 110 16 U 15 U	MWBR-1 10/09/03 23 7,500 23 U 9.5 U 40 U 16 U 290 68 26 U 12 U	13 3,900 NA 4,8 U 20 U 7,8 U 140 NA 13 U 6.0 U	MWBR-1 08/23/04 35 8,400 18 U 17 U 46 U 18 U 330 65 18 U 12 U	MWBR-1 10/12/04 28 6,800 18 U 17 U 46 U 18 U 290 54 18 U 12 U	MWBR-1 03/23/05 14 U 6,300 18 U 17 U 46 U 18 U 230 94 18 U 12 U	MW-23 09/22/05 1.6 U 580 3.1 2.6 U 2.6 U 2.2 U 1.8 U 2.2 U 3.8 1.7 U
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chloroform Methylene Chloride Tetrachloroethane Trichloroethane icis-1,2-Dichloroethane icis-1,2-Dichloroethane Carbon Disulfide Volatile Organics	CAO Goal ¹ 5 5 5 5 0.19 5 5 5 2 1000	Location ID: Sample Date: Units ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	MW-27 10/03/17 2.9 43 18 2.0 U 2.0 UB NA 11 J 7.3 7.9 NA	MW-27 11/20/18 3.7 7.7 9.9 1.0 U 1.0 U 1.0 U 8 5.3 5.2 1.0 U	MW-27 09/20/19 4.1 13 16 1.0 U 1.0 U NA 12 7.3 13 NA	MW-27 10/08/20 1.0 U 13 9.2 1.0 U 1.0 U 6.2 4.5 5.9 NA	MW-27 09/15/21 1.0 U 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ NA	MW-27 09/15/22 2.2 3.0 5.4 1.0 U 1.0 U 5.9 4.5 5.7 1.0 U	MW-28D 05/02/11 250 U 5,700 250 U MWBR-1	MW-28D 11/20/14 2.8 J 3,500 8.0 J 1.2 J 10 U 15 6.9 J 25 10 UJ MWBR-1	MW-28D 06/04/15 200 U 3,500 200 U 200 U 200 U 200 U 200 U 200 U 200 U 200 U 200 U	MW-28D 11/16/15 5.1 J 3,200 11 J 20 U 20 U 20 U 17 J 8.0 J 21 20 U	MW-28D 10/04/16 100 U 2,700 NA 20 U 100 U 20 U 15 J NA 14 J 20 U	MW-28D 10/03/17 2.9 2,000 D 8 0.83 J 0.40 J NA 19 6.9 18 NA	MW-28D 11/20/18 4.1 1,900 D 4.3 0.68 J 1.0 U 0.84 J 14 5.3 8.5 1.0 U	MW-28D 09/20/19 130 U 2,400 J 130 U 130 U 130 U 130 U 130 U 130 U NA 130 U 130 U NA 130 U 130 U 130 U 130 U 130 U	MW-28D 10/08/20 1.0 J 450 D 10 U 1.0 U J 1.0 U J 2.7 J 1.8 J 2.6 J NA	MW-28D 09/14/21 5.0 UJ 1,200 D 5.0 U 5.0 UJ NA 5.0 UJ S.0 UJ NA 5.0 UJ NA WBR-2	MW-28D 09/14/22 50 U 1,600 50 U 50 U 50 U 50 U 50 U 50 U 50 U 50	MWBR-1 09/24/98 8.0 3,400,000 D NA 13,000 34 2.0 U 16,000 NA 2.0 U 2,000 U	MWBR-1 01/12/99 15 3,000 D 10 U 5.0 U 5.0 U 42 NA 10 5.0 U	MWBR-1 04/12/99 18 U 5,600 NA 30 U 56 U 31 U 22 U NA 36 U 28 U MWBR-2	MWBR-1 11/15/01 2.0 U 1,800 NA 1.9 U 10 U 2.8 U 30 NA 9.3 2.5 U	MWBR-1 12/19/01 0.20 U 60 NA 0.20 U 1.0 U 0.30 U 1.2 NA 0.20 U 0.20 U 0.20 U	MWBR-1 03/03/03 14 U 4,900 24 U 12 U 44 U 12 U 110 16 U 15 U	MWBR-1 10/09/03 23 7,500 23 U 9.5 U 40 U 16 U 290 68 26 U 12 U	13 3,900 NA 4,8 U 20 U 7,8 U 140 NA 13 U 6.0 U	MWBR-1 08/23/04 35 8,400 18 U 17 U 46 U 18 U 330 65 18 U 12 U	MWBR-1 10/12/04 28 6,800 18 U 17 U 46 U 18 U 290 54 18 U 12 U	MWBR-1 03/23/05 14 U 6,300 18 U 17 U 46 U 18 U 230 94 18 U 12 U	MW-23 09/22/05 1.6 U 580 3.1 2.6 U 2.2 U 1.8 U 2.2 U 3.8 1.7 U MWBR-3 01/12/99
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chioroethane Chioroethane Chioroethane Chioroethane Chioroethane Trichloroethene Trichloroethene Inchloroethene Gail 2-Dichloroethene Cathon Dauffide	CAO Goal ¹ 5 5 5 5 5 5 5 5 10.19 5 5 5 10.019 5 5 5 5 5 10.000	Location ID: Sample Date: Units ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	MW-27 10/03/17 2.9 43 18 2.0 U 2.0 UB NA 11 J 7.3 7.9 NA MW-23	MW-27 11/20/18 3.7 7.7 9.9 1.0 U 1.0 U 1.0 U 8 5.3 5.2 1.0 U MW-23	MW-27 09/20/19 4.1 13 16 1.0 U 1.0 U NA 12 7.3 13 NA MW-23 01/03/08	MW-27 10/08/20 1.0 U 13 9.2 1.0 U 1.0 U 1.0 U 6.2 4.5 5.9 NA MW-23	MW-27 09/15/21 1.0 U 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ NA MWBR-1 06/21/05	MW-27 09/15/22 2.2 3.0 5.4 1.0 U 1.0 U 5.9 4.5 5.7 1.0 U	MW-28D 05/02/11 250 U 5,700 250 U	MW-28D 11/20/14 2.8 J 3,500 8.0 J 1.2 J 10 U 10 U 15 6.9 J 25 10 UJ MWBR-1	MW-28D 06/04/15 200 U 3,500 200 U 200 U 200 U 200 U 200 U 200 U 200 U 200 U 200 U 200 U	MW-28D 11/16/15 5.1 J 3.200 11 J 20 U 20 U 20 U 17 J 8.0 J 21 20 U WBR-1 05/03/11	MW-28D 10/04/16 100 U 2,700 NA 20 U 100 U 20 U 15 J NA 14 J 20 U MWBR-2	MW-28D 10/03/17 2.9 2,000 D 8 0.83 J 0.40 J NA 19 6.9 18 NA MWBR-2	MW-28D 11/20/18 4.1 1,900 D 4.3 0.88 J 1.0 U 0.84 J 14 5.3 8.5 1.0 U MWBR-2 04/12/99	MW-28D 09/20/19 130 U 2,400 J 130 U 130 U 130 U NA 130 U 130 U NA 130 U NA	MW-28D 10/08/20 1.0 J 450 D 10 U 1.0 U J 1.0 U J 2.7 J 2.6 J NA MWBR-2	MW-28D 09/14/21 5.0 UJ 1,200 D 5.0 U 5.0 UJ NA 5.0 UJ 5.0 UJ NA 5.0 UJ NA MWBR-2	MW-28D 09/14/22 50 U 1,600 50 U 50 U 50 U 50 U 50 U 50 U MWBR-2 10/09/03	MWBR-1 09/24/98 8.0 3,400,000 D NA 13,000 34 2.0 U 16,000 NA 2.0 U 2,000 U MWBR-2 03/18/04	MWBR-1 01/12/99 15 3,000 D 10 U 5.0 U 5.0 U 5.0 U 42 NA 10 5.0 U MWBR-2	MWBR-1 04/12/99 18 U 5,600 NA 30 U 56 U 31 U 22 U NA 36 U 28 U MWBR-2 10/12/04	MWBR-1 11/15/01 2.0 U 1,800 NA 1.9 U 10 U 2.8 U 30 NA 9.3 2.5 U MWBR-2	MWBR-1 12/19/01 0.20 U 60 NA 0.20 U 1.0 U 0.30 U 1.2 NA 0.20 U 0.20 U 0.30 U MWBR-2	MWBR-1 03/03/03 14 U 4,900 24 U 12 U 44 U 12 U 16 U 14 U 15 U MWBR-2 09/22/05	MWBR-1 10/09/03 23 7,500 23 U 9.5 U 40 U 16 U 290 68 26 U 12 U MWBR-2	MWBR-1 03/18/04 13 3,900 NA 4,8 U 20 U 7,8 U 140 NA 13 U 6,0 U MWBR-2 03/16/06	MWBR-1 08/23/04 35 8.400 18 U 17 U 46 U 18 U 330 65 18 U 12 U MWBR-2 06/22/06	MWBR-1 10/12/04 28 6.800 18 U 17 U 46 U 18 U 290 54 18 U 290 54 18 U 291 WWBR-2	MWBR-1 03/23/05 14 U 6,300 18 U 17 U 46 U 18 U 230 94 18 U 12 U MWBR-3 09/29/98	MW-23 09/22/05 1.6 U 580 3.1 2.6 U 2.6 U 2.2 U 1.8 U 2.2 U 3.8 1.7 U
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chioroethane Chioroethane Chioroethane Chioroethane Chioroethane Trichloroethene Trichloroethene Gail 2-Dichloroethene Gail 2-Dichloroethene Cathon Daulide Volatile Organics 1,1,2-Trichloroethane	CAO Goal ¹ 5 5 5 5 5 5 5 5 10.19 5 5 5 10.019 5 5 5 5 5 10.000	Location ID: sample Date: Units ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	MW-27 10/03/17 2.9 43 18 2.0 U 2.0 UB NA 11 J 7.3 7.9 NA MW-23 03/16/06	MW-27 11/20/18 3.7 7.7 9.9 1.0 U 1.0 U 1.0 U 8 5.3 5.2 1.0 U MW-23 06/22/06	MW-27 09/20/19 4.1 13 16 1.0 U 1.0 U NA 12 7.3 13 NA MW-23 01/03/08	1.0 U 1.0 U 1.3 9.2 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 4.5 5.9 NA MW-23 01/03/08	MW-27 09/15/21 1.0 U 1.0	MW-27 09/15/22 2.2 3.0 5.4 1.0 U 1.0 U 1.0 U 5.9 4.5 5.7 1.0 U	MW-28D 05/02/11 250 U 5,700 250 U 150 U 150 U 150 U 150 U 150 U	MW-28D 11/20/14 2.8 J 3,500 8.0 J 12.J 10 U 15 6.9 J 25 10 UJ MWBR-1 03/16/06	MW-28D 06/04/15 200 U 3,500 200 U 100 U	MW-28D 11/16/15 5.1 J 3,200 11 J 20 U 20 U 20 U 17 J 8.0 J 21 20 U MWBR-1 05/03/11	MW-28D 10/04/16 100 U 2,700 NA 20 U 100 U 20 U 15 J NA 14 J 20 U MWBR-2 09/29/98	MW-28D 10/03/17 2.9 2,000 D 8 0.83 J 0.40 J NA 19 6.9 18 NA MWBR-2	MW-28D 11/20/18 4.1 1,900 D 4.3 0.88 J 1.0 U 0.84 J 14 5.3 8.5 1.0 U MWBR-2 04/12/99	MW-28D 09/20/19 130 U 2,400 J 130 U 130 U 130 U NA 130 U NA 130 U NA 130 U NA 130 U 130 U NA 130 U NA 130 U NA 0.20 U	MW-28D 10/08/20 1.0 J 450 D 10 U 1.0 U J 1.0 U J 1.0 U J 2.7 J 1.8 J 2.6 J NA MWBR-2 12/19/01	MW-28D 09/14/21 5.0 UJ 1,200 D 5.0 U 5.0 UJ NA 5.0 UJ 5.0 UJ NA 5.0 UJ 5.0 UJ NA 4.0 UJ 5.0 UJ 0.3 UJ	MW-28D 09/14/22 50 U 1,600 50 U 50	MWBR-1 09/24/98 8.0 3.400,000 D NA 13,000 34 2.0 U 16,000 NA 2.0 U 2,000 U MWBR-2 03/18/04	MWBR-1 01/12/99 15 3,000 D 10 U 5.0 U 5.0 U 5.0 U 42 NA 10 5.0 U 5.0 U	MWBR-1 04/12/99 18 U 5.690 NA 30 U 55 U 22 U NA 36 U 28 U WWBR-2 10/12/04	MWBR-1 11/15/01 2.0 U 1.800 NA 1.9 U 10 U 2.8 U 30 NA 9.3 2.5 U MWBR-2 03/22/05	MWBR-1 12/19/01 0.20 U 60 NA 0.20 U 1.0 U 0.30 U 1.2 NA 0.20 U 0.20 U 0.30 U 0.30 U 0.30 U 0.30 U 0.30 U	MWBR-1 03/03/03 14 U 4,900 24 U 12 U 44 U 12 U 16 U 14 U 15 U MWBR-2 09/22/05	MWBR-1 10/09/03 23 7,500 23 U 9.5 U 40 U 16 U 290 68 26 U 12 U MWBR-2 12/15/05	MWBR-1 03/18/04 13 3,900 NA 4.8 U 20 U 7.8 U 140 NA 13 U 6.0 U MWBR-2 03/16/06	MWBR-1 08/23/04 35 8,400 18 U 17 U 46 U 18 U 330 65 18 U 12 U MWBR-2 06/22/06	MWBR-1 10/12/04 28 6,800 18 U 17 U 46 U 18 U 290 54 18 U 12 U MWBR-2 05/02/11	MWBR-1 03/23/05 14 U 6,300 18 U 17 U 46 U 18 U 230 94 18 U 12 U MWBR-3 09/29/98	MW-23 09/22/05 1.6 U 580 3.1 2.6 U 2.2 U 1.8 U 2.2 U 3.8 1.7 U MWBR-3 01/12/99
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chloroform Methylene Chloride Tetrachloroethane Trichloroethane icis-1,2-Dichloroethane icis-1,2-Dichloroethane Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane	CAO Goal ¹ 5 5 5 5 5 5 5 5 10.19 5 5 5 10.019 5 5 5 5 5 10.000	Location ID: sample Date: Units ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	MW-27 10/03/17 2.9 43 18 2.0 UB NA 11 J 7.3 7.9 NA MW-23 03/16/06	MW-27 11/20/18 3.7 7.7 9.9 1.0 U 1.0 U 8 5.3 5.2 1.0 U MW-23 06/22/06	MW-27 09/20/19 4.1 13 16 1.0 U 1.0 U NA 12 7.3 13 NA MW-23 01/03/08	MW-27 10/08/20 1.0 U 13 9.2 1.0 U 1.0 U 1.0 U 6.2 4.5 5.9 NA MW-23 01/03/08	MW-27 09/15/21 1.0 U 1.0 U	MW-27 09/15/22 2.2 3.0 5.4 1.0 U 1.0 U 5.9 4.5 5.7 1.0 U MWBR-1 09/22/05	MW-28D 05/02/11 250 U 5,700 250 U 150 U	MW-28D 11/20/14 2.8 J 3.500 8.0 J 1.2 J 10 U 15 6.9 J 25 10 UJ MWBR-1 03/16/06	MW-28D 06/04/15 200 U 3,500 200 U 200 U 200 U 200 U 200 U 200 U 200 U 200 U 200 U 100 U 100 U 100 U 100 U 100 U 100 U 100 U	MW-28D 11/16/15 5.1 J 3.200 11 J 20 U 20 U 20 U 17 J 8.0 J 21 20 U 05/03/11 75 U 1,400	MW-28D 10/04/16 100 U 2,700 NA 20 U 100 U 20 U 15 J NA 14 J 20 U MWBR-2 09/29/98	MW-28D 10/03/17 2.9 2,000 D 8 0.83 J 0.40 J NA 19 6.9 18 NA MWBR-2 01/12/99	MW-28D 11/20/18 4.1 1,900 D 4.3 0.68 J 1.0 U 0.84 J 14 5.3 8.5 1.0 U MWBR-2 04/1 2/99	MW-28D 09/20/19 130 U 2,400 J 130 U 130 U 130 U 130 U 130 U 130 U NA 130 U 130 U 130 U 130 U 130 U 130 U 0.20 U 9.8	MW-28D 10/08/20 1.0 J 450 D 10 U 1.0 U J 1.0 U J 2.7 J 2.6 J NA MWBR-2 12/19/01	MW-28D 09/14/21 5.0 UJ 1,200 D 5.0 U 5.0 UJ 5.0 UJ 5.0 UJ 6.0 U 5.0 UJ NA 5.0 UJ NA 5.0 U NA 0.30 U 0.30 U 2.9	MW-28D 09/14/22 50 U 1,600 50 U 50 U 50 U 50 U 50 U 50 U 50 U 50	MWBR-1 09/24/98 8.0 3,400,000 D NA 13,000 34 2.0 U 16,000 NA 2.0 U 2,000 U MWBR-2 03/18/04 0.30 U 0.30 U	MWBR-1 01/12/99 15 3,000 D 10 U 5.0 U 5.0 U 42 NA 10 5.0 U 42 NA 0.30 U 0.40 U	MWBR-1 04/12/99 18 U 5.600 NA 30 U 56 U 31 U 22 U NA 36 U 28 U MWBR-2 10/12/04	MWBR-1 11/15/01 2.0 U 1,800 NA 1,9 U 10 U 2.8 U 30 NA 9.3 2.5 U MWBR-2 03/22/05	MWBR-1 12/19/01 0.20 U 60 NA 0.20 U 1.0 U 0.30 U 1.2 U 0.20 U 0.20 U 0.30 U 1.2 U 0.20 U 0.30 U	MWBR-1 03/03/03 14 U 4,900 24 U 12 U 44 U 12 U 110 116 U 14 U 15 U MWBR-2 09/22/05	MWBR-1 10/09/03 23 7,500 23 U 9,5 U 40 U 16 U 290 68 26 U 12 U MWBR-2 12/15/05 0.30 U 2.7	MWBR-1 03/18/04 13 3,900 NA 4,8 U 20 U 7,8 U 140 NA 13 U 6,0 U MWBR-2 03/16/06	MWBR-1 08/23/04 35 8,400 18 U 17 U 46 U 18 U 330 65 18 U 12 U MWBR-2 06/22/06 0.30 U 1.7	MWBR-1 10/12/04 28 6,800 18 U 17 U 46 U 18 U 290 54 18 U 12 U MWBR-2 05/02/11	MWBR-1 03/23/05 14 U 6,300 18 U 17 U 46 U 18 U 230 94 18 U 12 U MWBR-3 09/29/98	MW-23 09/22/05 1.6 U 580 3.1 2.6 U 2.2 U 1.8 U 2.2 U 1.8 U 2.2 U 1.8 U 2.2 U 3.8 1.7 U MWBR-3 01/12/99
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chioroethane Chioroethane Chioroethane Chioroethane Chioroethane Trichloroethene Trichloroethene Cast 2-Dichloroethene Cast 2-Dichloroethene Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chioroform Methylene Chloride	\$ CAO Goal 1 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Location ID: sample Date: Units ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	MW-27 10/03/17 2.9 43 18 2.0 U 2.0 UB NA 11 J 7.3 7.9 NA MW-23 03/16/06 1.6 U 490 NA 2.6 U	MW-27 11/20/18 3.7 7.7 9.9 1.0 U 1.0 U 8.8 5.3 5.2 1.0 U MW-23 06/22/06 1.6 U 450 1.2 U 2.6 U 2.6 U	MW-27 09/2019 4.1 13 16 16 1.0 U 1.0	MW-27 10/08/20 10 U 13 13 9 2 10 U 10 U 10 U 62 4.5 5.9 NA MW-23 01/03/08 0.40 U 310 0.90 U 0.40 U	MW-27 09/15/21 1.0 U 1.0	MW-27 09/15/22 22 3.0 5.4 1.0 U 1.0 U 5.9 4.5 5.7 1.0 U MWBR-1 09/22/05 18 6,900 12 U 26 U	MW-28D 05/02/11 250 U 5,700 250 U 250 U	MW-28D 11/20/14 2.8.J 3.500 8.0.J 12.J 10.U 10.U 10.U 10.U 10.U 10.U 10.U 10.U	MW-28D 06/04/15 200 U 3,500 200 U 100 U 10	MW-28D 11/16/15 5.1 J 3.200 11.J 20 U 20 U 20 U 20 U 20 U 50 J 6.0 J 6.0 J 6.0 J 75 U 1.400 75 U 75 U 75 U 75 U	MW-28D 10/04/16 10/04	MW-28D 10/03/17 2.9 2,000 B 8 0.83 J 0,40 J NA 19 6.9 18 NA MWBR-2 01/12/99 5.0 U 16 10 J 5.0 U 5.0 U	MW-28D 11/20/18 4.1 1.900 D 4.3 0.68 J 1.0 U 0.84 J 14 5.3 8.5 1.0 U MWBR-2 04/12/99 0.35 U 7.5 NA 0.59 U 1.1 U	MW-28D 09/20/19 130 U 2,400 J 130 U 130 U	MW-28D 10/08/20 10/08/20 450 D 10 U 10 U 10 U 10 U 10 U 10 U 10 U 10 U	MW-28D 09/14/21 5.0 UJ 1.200 D 5.0 U 5.0 U 5.0 U 5.0 U 5.0 U 5.0 U 8.0 U	MW-28D 09/14/22 50 U 1,600 50 U 50 U 50 U 50 U 50 U 50 U 50 U 50	MWBR-1 09/24/98 8.0 3.400,000 D NA 13,000 34 2.0 U 16,000 NA 2.0 U 2.00 U MWBR-2 03/18/04 0.30 U 0.30 U NA 0.20 U 0.30 U	MWBR-1 01/12/99 15 3.000 D 10 U 5.0 U 5.0 U 5.0 U 42 NA 10 10 MWBR-2 08/23/04 0.30 U 0.40 U 0.30 U 0.40 U 0.30 U	MWBR-1 04/12/99 18 U 5,000 NA 30 U 5,000 NB 31 U 22 U NB	MWBR-1 11/15/01 2.0 U 1.800 1.901 1.9 U 10 U 2.8 U 30 NA 9.3 2.5 U 30 WWBR-2 03/22/05	MWBR-1 12/19/01 0.20 U 60 NA 0.20 U 1.0 U 1.0 U 1.2 NA 0.20 U 0.50 U 0.50 U 0.50 U 0.50 U 0.50 U	MWBR-1 03/03/03 14 U 4 900 24 U 12 U 44 U 110 110 110 110 110 1110 110 110 110 1	MWBR-1 10/09/03 23 7,500 23 U 9,5 U 40 U 29 U 60 U 29 U 16 U 290 68 26 U 12 U MWBR-2 12/15/05 0.30 U 2.7 0.20 U 0.50 U	MWBR-1 03/18/04 13 3,900 NA 4.8 U 20 U 7.8 U 1440 13 U 6.0 U 03/16/06 03/16/06 03/16/06 03/16/06 0.50 U 0.50 U	MWBR-1 08/23/04 35 8,400 18 U 17 U 46 U 18 U 18 U 19 U 19 U 46 U 10 U 330 65 18 U 10 U MWBR-2 06/22/06 0.30 U 1.7 0.20 U 0.50 U 0.50 U	MWBR-1 10/12/04 28 6.800 118 U 17 U 46 U 18 U 290 18 U 12 U MWBR-2 05/02/11 1.0 U 2.6 1.0 U 1.0 U 2.7	MWBR-1 03/23/05 14 U 6,300 18 U 17 U 46 U 17 U 230 94 18 U 12 U 17 U 200 MWBR-3 09/29/98 2.0 U 2.0 U NA 2.0 U 5.0 U	MW-23 09/22/05 16 U 580 3.1 2.6 U 2.8 U 2.8 U 2.8 U 3.8 1.7 U 3.8 1.7 U 3.8 01/12/99 5.0 U 5.0 U 5.0 U
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane Chlorotform Methylene Chloride Tetrachloroethene Trichloroethene Trichloroethene Cis1,2-Dichloroethene Vinyl Chloride Carbon Disulfide Volatile Organics 1,1,2-Trichloroethane Chloroethane Chloroethane Chloroethane Chloroethane Chloroethane Chloroethane Chloroethane Chloroethane Totrachloroethene	\$ CAO Goal 1 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Location ID: sample Date: Units up'L ug'L ug'L ug'L ug'L ug'L ug'L ug'L ug	MW-27 10/03/17 2.9 43 18 12.0 U 2.0 UB NA 11 J 7.3 7.9 NA 03/16/06 1.6 U 490 NA 2.6 U 2.6 U 2.6 U 2.2 U	MW-27 11/2018 3.7 7.7 9.9 1.0 U 1.0 U 8 5.3 5.2 1.0 U MW-23 06/2206 1.6 U 2.6 U 2.6 U 2.2 U	MW-27 09/2019 4.1 13 16 1.0 U NA 12 7.3 13 NA 01/03/08 01/03/08 0.40 U 0.80 U 0.80 U 0.80 U	MW-27 10/08/20 11.0 U 13 9.2 1.0 U 1.0 U 1.0 U 1.0 U 6.2 4.5 5.9 NA MW-23 01/03/08 0.40 U 0.80 U 0.80 U	MW-27 09/15/21 1.0 U 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ 1.0 UJ NA MWBR-1 06/21/05 16 U 6.500 19 26 U 26 U 26 U	MW-27 09/15/22 2.2 3.0 5.4 1.0 U 1.0 U 1.0 U 5.9 4.5 5.7 1.0 U MWBR-1 09/22/05 18 6,900 12 U 26 U	MW-28D 05/02/11 250 U 5/700 1 250 U 5/700 250 U 12/15/05 16 U 12/15/05 12 U 250 U 25	MW-28D 11/20/14 2.8 J 3,500 8.0 J 1.2 J 10 U 15 6.9 J 25 10 UJ MWBR-1 03/16/06 33 U 7,500 NA 52 U 15 15 16 16 17 16 17 16 17 16 17 16 16 16 16 16 16 16 16 16 16 16 16 16	MW-28D 06/04/15 200 U 3.500 200 U 100 U 200 U 100 U 10	MW-28D 11/16/15 5.1 J 3.200 11.J 20 U 20 U 20 U 17 J 8.0 J 21 20 U MWBR-1 05/03/11 75 U 1.400 75 U 75 U 75 U 75 U	MW-28D 1004/16 100 U 2,700 NA 20 U 20 U 20 U 20 U 20 U 20 U 20 U 20 U	MW-28D 10/03/17 2.9 2.000 D 8 0.83 J 0.40 J NA 19 6.9 18 NA 01/12/99 5.0 U 5.0 U 5.0 U 5.0 U 5.0 U	MW-28D 11/20/18 4.1 1.900 D 4.3 0.68 J 1.0 U 0.84 J 1.0 U 0.84 J 1.0 U 0.84 J 1.0 U 0.85 U 0.7.5 NA 0.59 U 1.1 U	MW-28D 09/20/19 130 U 2,400 J 130 U 130	MW-28D 10/08/20 1.0 J 450 D 10 U 1.0 U J 1.0 U J 2.7 J 18 J 2.6 J NA MWBR-2 12/19/01 0.20 U 8.4 NA 0.20 U 1.0 U 0.20 U 0.	MW-28D 09/14/21 5.0 UJ 1.200 D 5.0 UJ 5.0 UJ 5.0 UJ 5.0 UJ 5.0 UJ 5.0 UJ NA 5.0 UJ 5.0 UJ 0.3 0 UJ 0.3 0 UJ 0.3 0 UJ 0.9	MW-28D 09/14/22 50 U 1,600 50 U 50 U 50 U 50 U 50 U 50 U 50 U 50	MWBR-1 09/24/98 8.0 3.400,000 D NA 13,000 13,000 14,000 NA 2.0 U 2.000 U 2.000 U 3.400 MWBR-2 0.318/04 0.30 U 0.30 U NA 0.30 U 0.30 U 0.80 U	MWBR-1 01/1/2/99 15 3,000 D 10 U 5,0 U 5,0 U 42 NA 10 5,0 U 6,0 U 42 NA 0,0 U	MWBR-1 04/12/99 18 U 5,5600 NA 30 U 5510 31 U 22 U NA 36 U 28 U 28 U MWBR-2 10/12/04 0.30 U 0.40 U 0.99 U 0.40 U 0.99 U 0.40 U	MWBR-1 11/15/01 12.0 U 1.800 1.800 1.900 1.9 U 2.8 U 3.0 V 3.2 S U 0.30 U 0.40 U 0.30 U 0.90 U 0.40 U 0.90 U	MWBR-1 12/1901 0.20 U 60 NA 0.20 U 1.0 U 0.30 U 1.2 NA 0.20 U	MWBR-1 03/03/03 14 U 4.900 24 U 12 U 42 U 12 U 15 U 15 U 15 U 15 U 16 U 17 U 18 U 18 U 19 U 19 U 10	MWBR-1 10/09/03 23 7,500 23 0 9,5 U 40 U 16 U 290 68 26 U 12 U MWBR-2 12/15/05 0.30 U 2.7 0.20 U 0.50 U 0.60 U	MWBR-1 03/18/04 13 3,900 NA 4,8 U 20 U 7.8 U 140 NA 13 U 6.0 U MWBR-2 03/16/06 0.30 U 3.0 NA 0.50 U 0.50 U 0.40 U	MWBR-1 08/23/04 35 8.400 18 U 17 U 46 U 18 U 330 65 18 U 12 U MWBR-2 06/22/06 0.30 U 1.7 0.20 U 0.50 U 0.50 U 0.40 U	MWBR-1 10/12/04 28 6.8000 18 U 17 U 18 U 290 54 18 U 12 U 12 U MWBR-2 05/02/11 1.0 U 2.6 1.0 U 2.7	MWBR-1 03/23/05 14-U 63/000 18-U 18-U 17-U 18-U 18-U 12-U 18-U 12-U MWBR-3 09/23/08 2.0-U 2.0-U NA 2.0-U 5.0-U 5.0-U 2.0-U 5.0-U 5.0	MW-23 09/22/05 1.6 U 580 3.1 2.6 U 2.2 U 1.8 U 2.2 U 2.2 U 3.8 1.7 U MWBR-3 01/12/99 5.0 U 5.0 U
Volatile Organics 1,1,2-Trichlorcethane 1,2-Dichlorcethane 1,2-Dichlorcethane Chlorothane Chlorothane Chlorothane Chlorothane Trichlorcethane Trichlorcethene Trichlorothene Cis-1,2-Dichlorothene Volatile Organics 1,1,2-Trichlorcethane 1,2-Dichlorothane Chlorothane Chlorothane Chlorothane Chlorotom Methylene Chloride Tetrachloroethane Trichloroethane Trichloroethane	\$ CAO Goal 5	Location ID: sample Date: Units ugl. ugl. ugl. ugl. ugl. ugl. ugl. ugl.	MW-27 10/03/17 2.9 43 18 2.0 U 2.0 UB NA 11 J 7.3 7.9 NA 03/16/06 1.6 U 490 NA 2.6 U 2.6 U 2.2 U	MW-27 11/20/18 3.7 7.7 9.9 1.0 U 1.0 U 8 5.3 5.2 1.0 U 450 450 1.2 U 2.6 U 2.6 U 2.2 U 1.8 U	MW-27 09/20/19 4.1 13 16 1.0 U NA 12 7.3 13 NA 01/03/08 01/03/08 0.40 U 0.90 U 0.40 U 0.80 U 0.80 U	MW-27 10/08/20 1.0 U 13 9.2 1.0 U 1.	MW-27 09/15/21 1.0 U 1.0 UJ 1.0 UJ 1.	MW-27 09/15/22 2.2 3.0 5.4 1.0 U 1.0 U 1.0 U 5.7 1.0 U 1.0 U	MW-28D 05/02/11 250 U 5.700 1 250 U	MW-28D 11/20/14 2.8 J 3.500 8.0 J 12 J 10 U 15 G 9 J 25 10 UJ MWB-1 03/16/06 33 U 7.500 NA 52 U 51 U 45 U	MW-28D 06/04/15 200 U 3,500 200 U 16 U 26 U 26 U 26 U 26 U 28 U 180	MW-28D 11/16/15 5.1.J 3.200 11.J 20.U 20.U 20.U 17.J 20.U 20.U 17.J 20.U 17.	MW-28D 10/04/16 10/04/16 10/04/16 10/04/16 10/04/16 10/04/16 10/04 10/04 10/04 10/04 10/04 10/04 10/04 10/04 10/04 10/04 10/04/16	MW-28D 10/03/17 2.9 2,000 D 8.083 J 0,40 J NA 19 6.9 18 NA MWBR-2 01/12/99 5.0 U 16 10 U 5.0 U 5.0 U 5.0 U 5.0 U	MW-28D 11/20/18 4.1 1,900 D 4.3 0.68 J 1,0 U 0.84 J 14 5.3 5.3 1.0 U MWBR-2 0.47 (299 0.35 U 7.5 NA 0.59 U 1.1 U 0.62 U	MW-28D 09/20/19 130 U 2,400 J 130 U 2,400 J 130 U 0,00 U	MW-28D 10/08/20 10/08/20 450 D 10 U 10 U 1	MW-28D 09/14/21 5.0 UJ 1.200 D 5.0 U 5.0 UJ 5.0	MW-28D 09/14/22 50 U 1,600 50 U 50	MWBR-1 09/24/98 8.0 3.400,000 D NA 13,000 34 2.0 U 2.00 U 2.000 U MWBR-2 03/18/04 0.30 U	MWBR-1 01/12/99 15 3.000 D 10 U 5.0 U 5.0 U 5.0 U 42 NA 10 5.0 U 42 08/23/04 MWBR-2 08/23/04 0.30 U 0.40 U 0.30 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U	MWBR-1 04/12/99 18 U 5,5000 NA 30 U 5,500 31 U 22 U NA 30 U 86 U 30 U 040 U 040 U 0,40 U 0,40 U 0,90 U 0,40 U	MWBR-1 11/15/01 2.0 U 1.800 1.800 1.901 1.9 U 1.9 U 2.8 U 3.0 NA 2.8 U 3.0 V 4.0 U 4	MWBR-1 12/19/01 0.20 U 60 NA 0.20 U 1.0 U 0.30 U 1.2 V NA 0.20 U 0.30 U 0.30 U 0.30 U 0.30 U 0.40 U 0.50 U 0.40 U 0.70	MWBR-1 03/03/03 14 U 4 500 24 U 12 U 44 U 110 110 110 1110 1110 1110 1110 1110	MWBR-1 10/09/03 23 7,500 23 1 9,5 U 40 U 29 0 68 26 U 12 U 17/10/5 0.30 U 2.7 0.20 U 0.50 U 0.40 U 0.40 U	MWBR-1 03/18/04 13 3,900 NA 4.8 U 20 U 7.8 U 140 NA NA 0.50 U 3.0 NA 0.50 U 0.40 U 0.40 U	MWBR-1 08/23/04 35 8,400 18 U 17 U 18 U 330 65 18 U 12 U MWBR-2 06/22/06 0.30 U 1,7 0.20 U 0.50 U 0.40 U	MWBR-1 10/12/04 28 6.800 118 U 17 U 46 U 18 U 200 54 18 U 12 U 10 U 2.6 1.0 U 2.6 1.0 U 2.7 1.0 U	MWBR-1 03/23/05 14 U 6.300 18 U 17 U 18 U 17 U 18 U 18 U 12 U 12 U 10 U 12 U 10	MW-23 09/22/05 1.6 U 550 3.1 2.6 U 2.8 U 2.2 U 1.8 U 2.2 U 3.8 1.7 U MWBR-3 01/12/99 10 U 5.0 U 5.
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane Chlorotform Methylene Chloride Tetrachloroethene Trichloroethene icis-1,2-Dichloroethene Vinyl Chloride Carbon Disulfide Volatile Organics 1,1,2-Trichloroethane Chloroethane Chloroethane Chloroethane Chloroethane Chloroethane Chloroethane Trichloroethene Trichloroethene Trichloroethene Trichloroethene Trichloroethene Trichloroethene Trichloroethene	\$ CAO Goal 1 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Location ID: sample Date: Units ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	MW-27 1009/17 2.9 43 18 2.0 UB 2.0 UB NA 11 J 7.3 7.9 NA MW-23 03/16/06 1.6 U 490 NA 2.6 U 2.6 U 2.6 U 2.6 U 2.8 U 3.8 U 4.8 U	MW-27 11/2018 3.7 7.7 9.9 1.0 U 1.0 U 8 5.3 5.2 1.0 U MW-23 06/2206 1.6 U 2.6 U 2.6 U 2.2 U	MW-27 09/20/19 4.1 13 16 10 1.0 U NA 12 7.3 13 NA 01/03/08 0.40 U 300 0.90 U 0.80 U	MW-27 10/08/20 11.0 U 13 9.2 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 1.0 U 6.2 4.5 5.9 NA MW-23 01/03/06 0.60 U 0.60 U 0.80 U	MW-27 09/15/21 1.0 U 1.0 UJ 1.0 UJ 2.0 UJ 1.0 UJ 2.0 UJ	MW-27 09/15/22 2.2 3.0 5.4 1.0.0 1.0.0 1.0.0 1.0.0 1.0.0 1.0.0 1.0.0 MWBR-1 09/12/05 18 6,900 12.0 12.0 22.0 28.0	MW-28D 05/02/11 250 U 5/02/11 250 U 5/02/11 250 U 10/02/10 250 U 2	MW-28D 11/20/14 2.8 J 3.500 8.0 J 1.2 J 10 U 15 6.9 J 25 10 U U MWBR-1 03/16/06 NA 52 U 51 U 45 U 52 U 51 U 45 U 200 NA	MW-28D 06/04/15 200 U 3,500 U 200 U 180 U 200 U	MW-28D 11/16/15 5.1 J 3.200 11.J 20 U 20 U 20 U 17 J 8.0 J 21 20 U MWBR-1 05/03/11 75 U 75 U 75 U 91	MW-28D 1004/16 100 U 2,700 NA 20 U 20 U 30,700 NA 100 U 20 U 100	MW-28D 10/03/17 2.9 2.000 D 8 0.83 J 0.40 J NA 19 6.9 18 NA MWBR-2 01/12/99 5.0 U 5.0 U 5.0 U 5.0 U 5.0 U 8.0 U	MW-28D 11/20/18 4.1 1.900 D 4.3 0.686 J 1.0 U 0.84 J 1.0 U 0.84 J 1.0 U 0.84 J 1.0 U 0.85 U 0.7.5 NA 0.59 U 1.1 U 0.50 D 0.50 U 0.50 D 0.50 D	MW-28D 09/20/19 130 U 2,400 J 130 U 130 U 130 U 130 U 130 U 130 U 130 U 130 U NA 130 U 130 U NA 130 U 130 U 130 U NA 130 U 130 U NA 130 U 130 U	MW-28D 10/08/20 10/08/20 10 J 450 D 10 U 1.0 U J 1.0 U J 2.7 J 18 J 2.6 J NA MWBR-2 12/19/01 0.20 U 8.4 NA 0.20 U 1.0 U 0.20 U 0.30 U 0.30 U	MW-28D 09/14/21 5.0 UJ 1,200 D 5.0 UJ 5.0 UJ 5.0 UJ 5.0 UJ 5.0 UJ 5.0 UJ NA 5.0 UJ 6.0	MW-28D 09/14/22 50 U 1,600 50 U 50	MWBR-1 09/24/98 8.0 3.400,000 D NA 13,000 13,000 14,000 NA 2.0 U 2.000 U 2.000 U 3.000 MWBR-2 0.30 U	MWBR-1 01/12/99 15 3.000 D 10 U 5.0 U 5.0 U 5.0 U 42 NA 10 5.0 U 5.0 U 40 0.30 U 0.40 U 0.40 U 0.30 U 0.40 U	MWBR-1 04/12/99 18 U 5,5600 NA 30 U 5,5600 31 U 22 U NA 36 U 28 U 28 U 20 U 0,40 U	MWBR-1 11/15/01 12.0 U 1.800 1.800 1.801 1.9 U 1.9 U 2.8 U 3.0 V 3.2 2.5 U MWBR-2 03/22/05 0.30 U 0.40 U	MWBR-1 12/1901 0.20 U 60 NA 0.20 U 1.0 U 0.30 U 1.2 L NA 0.20 U 0.30 U	MWBR-1 03/03/03 14 U 4.900 24 U 12 U 12 U 14 U 15 U 15 U 15 U 16 U 17 U 18 U 18 U 19 U 19 U 10	MWBR-1 10/09/03 23 7,500 23 0 9,5 U 40 U 16 U 290 68 26 U 12 U MWBR-2 12/15/05 0.30 U 2.7 0.20 U 0.50 U 0.40 U 0.40	MWBR-1 03/18/04 13 3,900 NA 4,8 U 20 U 7.8 U 140 NA 13 U 6.0 U MWBR-2 03/16/06 0.30 U 3.0 NA 0.50 U 0.40 U 0.40 U	MWBR-1 08/23/04 35 8,400 18 U 17 U 46 U 18 U 330 65 18 U 12 U MWBR-2 06/22/06 0.30 U 1.7 0.20 U 0.50 U 0.50 U 0.50 U 0.50 U	MWBR-1 10/12/04 28 6,8000 18 U 17 U 18 U 290 54 18 U 12 U 12 U 10	MWBR-1 03/23/05 14 U 6,3000 18 U 17 U 18 U 17 U 18 U 12 U 12 U 18 U 12 U 20 U NA	MW-23 09/22/05 16 U 580 3.1 2.6 U 2.2 U 1.8 U 2.2 U 2.1 S 1.7 U MWBR-3 01/12/99 5.0 U 5.0 U
Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chlorothane Chlorothane Chlorothane Chlorothane Trichloroethane Trichloroethene Trichloroethene Gis-1,2-Dichloroethene Virly Chloride Carbon Disulfide Volatile Organics 1,1,2-Trichloroethane 1,2-Dichloroethane 1,2-Dichloroethane Chlorothane Chlorothane Chlorothane Chlorothane Chlorothane Trichloroethane Trichloroethane Trichloroethene	\$ CAO Goal 5	Location ID: sample Date: Units ug1. ug1. ug1. ug1. ug1. ug1. ug1. ug1.	MW-27 10/03/17 2.9 43 18 2.0 U 2.0 UB NA 11 J 7.3 7.9 NA 03/16/06 1.6 U 490 NA 2.6 U 2.6 U 2.2 U	MW-27 11/20/18 3.7 7.7 9.9 1.0 U 1.0 U 8 5.3 5.2 1.0 U 450 450 1.2 U 2.6 U 2.6 U 2.2 U 1.8 U	MW-27 09/20/19 4.1 13 16 1.0 U NA 12 7.3 13 NA 01/03/08 01/03/08 0.40 U 0.90 U 0.40 U 0.80 U 0.80 U	MW-27 10/08/20 1.0 U 13 9.2 1.0 U 1.	MW-27 09/15/21 1.0 U 1.0 UJ 1.0 UJ 1.	MW-27 09/15/22 2.2 3.0 5.4 1.0 U 1.0 U 1.0 U 5.7 1.0 U 1.0 U	MW-28D 05/02/11 250 U 5.700 1 250 U	MW-28D 11/20/14 2.8 J 3.500 8.0 J 12 J 10 U 15 G 9 J 25 10 UJ MWB-1 03/16/06 33 U 7.500 NA 52 U 51 U 45 U	MW-28D 06/04/15 200 U 3,500 200 U 16 U 26 U 26 U 26 U 26 U 28 U 180	MW-28D 11/16/15 5.1.J 3.200 11.J 20.U 20.U 20.U 17.J 20.U 20.U 17.J 20.U 17.	MW-28D 10/04/16 10/04/16 10/04/16 10/04/16 10/04/16 10/04/16 10/04 10/04 10/04 10/04 10/04 10/04 10/04 10/04 10/04 10/04 10/04/16	MW-28D 10/03/17 2.9 2,000 D 8.083 J 0,40 J NA 19 6.9 18 NA MWBR-2 01/12/99 5.0 U 16 10 U 5.0 U 5.0 U 5.0 U 5.0 U	MW-28D 11/20/18 4.1 1,900 D 4.3 0.68 J 1,0 U 0.84 J 14 5.3 5.3 1.0 U MWBR-2 0.47 (299 0.35 U 7.5 NA 0.59 U 1.1 U 0.62 U	MW-28D 09/20/19 130 U 2,400 J 130 U 2,400 J 130 U 0,00 U	MW-28D 10/08/20 10/08/20 450 D 10 U 10 U 1	MW-28D 09/14/21 5.0 UJ 1.200 D 5.0 U 5.0 UJ 5.0	MW-28D 09/14/22 50 U 1,600 50 U 50	MWBR-1 09/24/98 8.0 3.400,000 D NA 13,000 34 2.0 U 2.00 U 2.000 U MWBR-2 03/18/04 0.30 U	MWBR-1 01/12/99 15 3.000 D 10 U 5.0 U 5.0 U 5.0 U 42 NA 10 5.0 U 42 08/23/04 MWBR-2 08/23/04 0.30 U 0.40 U 0.30 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U 0.40 U	MWBR-1 04/12/99 18 U 5,5000 NA 30 U 5,500 31 U 22 U NA 30 U 86 U 30 U 040 U 040 U 0,40 U 0,40 U 0,90 U 0,40 U	MWBR-1 11/15/01 2.0 U 1.800 1.800 1.901 1.9 U 1.9 U 2.8 U 3.0 NA 2.8 U 3.0 V 4.0 U 4	MWBR-1 12/19/01 0.20 U 60 NA 0.20 U 1.0 U 0.30 U 1.2 V NA 0.20 U 0.30 U 0.30 U 0.30 U 0.30 U 0.40 U 0.50 U 0.40 U 0.70	MWBR-1 03/03/03 14 U 4 500 24 U 12 U 44 U 110 110 110 1110 1110 1110 1110 1110	MWBR-1 10/09/03 23 7,500 23 1 9,5 U 40 U 29 0 68 26 U 12 U 17/10/5 0.30 U 2.7 0.20 U 0.50 U 0.40 U 0.40 U	MWBR-1 03/18/04 13 3,900 NA 4.8 U 20 U 7.8 U 140 NA NA 0.50 U 3.0 NA 0.50 U 0.40 U 0.40 U	MWBR-1 08/23/04 35 8,400 18 U 17 U 18 U 330 65 18 U 12 U MWBR-2 06/22/06 0.30 U 1,7 0.20 U 0.50 U 0.40 U	MWBR-1 10/12/04 28 6.800 118 U 17 U 46 U 18 U 200 54 18 U 12 U 10 U 2.6 1.0 U 2.6 1.0 U 2.7 1.0 U	MWBR-1 03/23/05 14 U 6.300 18 U 17 U 18 U 17 U 18 U 18 U 12 U 12 U 10 U 12 U 10	MW-23 09/22/05 1.6 U 550 3.1 2.6 U 2.8 U 2.2 U 1.8 U 2.2 U 3.8 1.7 U MWBR-3 01/12/99 5.0 U 5.0 U

*Notes are provided on the last page of the Appendix G table set.



		Location ID:	MW-24	MW-24	MW-25	MW-25	MW-25	MWBR-3	MWBR-4	MWBR-4 N	MWBR-4 MWBR-3																				
		Sample Date:	12/07/06	05/02/11	12/07/06	01/03/08	05/02/11	04/12/99	11/14/01	12/19/01	03/03/03	10/09/03	09/23/05	12/15/05	03/16/06	06/22/06	05/02/11	01/12/99	04/12/99	11/15/01	10/09/03	03/18/04	08/23/04	10/12/04	03/23/05	06/21/05	09/22/05	12/15/05	03/16/06	06/22/06 0	05/03/11 03/18/04
Volatile Organics	CAO Goal ¹	Units																													
1,1,2-Trichloroethane	5	ug/L	0.20 U	1.0 U	9.2 [7.8]	8.0	5.4 J	0.35 U	0.20 U	0.20 U	0.30 U	1.0 U	5.0 U	0.35 U	1.0 U	1.7 U	1.7 U	1.4 U	1.4 U	1.4 U	3.3 U	1.6 U	3.3 U	3.3 U	3.3 U	12 U 0.30 U					
1,2-Dichloroethane	5	ug/L	0.30 U	1.0 U	1,300 [1,200]	850	630	0.21 U	0.20 U	0.20 U	0.40 U	0.30 U	0.30 U	1.1	1.0	0.40	5.0	240 D	210 D	510	610	740	620	550	890	760	730	760	710	760	350 0.30 U
Chloroethane		ug/L	0.40 U	1.0 U	4.3 U [4.3 U]	4.3 U	25 U	NA	NA	NA	0.50 U	0.50 U	0.20 U	0.20 U	NA	0.20 U	1.0 U	10 U	NA	NA	2.3 U	NA	1.8 U	1.8 U	1.8 U	2.4 U	1.2 U	2.4 U	NA	2.4 U	12 U NA
Chloroform	0.19	ug/L	0.90	1.0 U	7.6 [6.5]	6.6	25 U	0.59 U	0.20 U	0.20 U	0.20 U	0.20 U	0.50 U	0.50 U	0.50 U	0.50 U	2.8	5.0 U	0.59 U	1.0 U	1.0 U	1.0 U	1.7 U	1.7 U	1.7 U	5.2 U	2.6 U	5.2 U	5.2 U	5.2 U	12 U 0.20 U
Methylene Chloride	5	ug/L	0.40 U	1.0 U	4.0 U [4.0 U]	4.0 U	25 U	1.1 U	1.0 U	1.0 U	0.90 U	0.80 U	0.50 U	0.50 U	0.50 U	0.50 U	17	8.0	4.6	5.1 U	8.2	10	7.6	6.6	6.8	9.2	7.8	9.9	10	22	12 0.80 U
Tetrachloroethene	5	ug/L	0.40 U	1.0 U	4.2 U [4.2 U]	4.2 U	25 U	0.62 U	0.30 U	0.30 U	0.20 U	0.30 U	0.40 U	0.40 U	0.40 U	0.40 U	1.0	5.0 U	0.62 U	1.4 U	1.6 U	1.6 U	1.8 U	1.8 U	1.8 U	4.5 U	2.2 U	4.5 U	4.5 U	4.5 U	12 U 0.30 U
Trichloroethene	5	ug/L	0.40 U	1.0 U	42 [36]	46	42	0.44 U	0.30 U	0.30 U	0.10 U	0.20 U	0.90	1.0	0.80	0.70	1.0 U	5.0 U	0.44 U	1.8	1.0	2.2	2.0 U	2.0 U	2.0 U	3.7 U	1.8 U	3.7 U	3.7 U	3.7 U	12 U 0.20 U
cis-1,2-Dichloroethene		ug/L	0.30 U	1.0 U	6.9 [7.2]	9.1	7.3 J	NA	NA	NA	0.30 U	0.20 U	0.40 U	0.40 U	NA	0.40 U	1.0 U	NA	NA	NA	1.2 U	NA	1.8 U	1.8 U	1.8 U	4.3 U	2.2 U	4.3 U	NA	4.3 U	12 U NA
Vinyl Chloride	2	ug/L	0.20 U	1.0 U	5.1 [4.2]	3.5	25 U	0.71 U	0.20 U	0.20 U	0.30 U	0.50 U	0.30 U	0.30 U	0.30 U	0.30 U	1.0 U	10 U	0.71 U	11	18	32	23	22	43	34	46	60	35	50	310 0.50 U
Carbon Disulfide	1000	ug/L	0.40 U	1.0 U	4.4 U [4.4 U]	4.4 U	25 U	0.56 U	0.20 U	0.20 U	0.30 U	0.20 U	0.30 U	0.30 U	0.30 U	0.30 U	1.0 U	5.0 U	0.56 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	3.4 U	1.7 U	3.4 U	3.4 U	3.4 U	12 U 0.20 U

		Location ID:	MW-27	MW-27	MW-27	MW-27	MW-27	MWBR-3	MWBR-3	MWBR-3	MWBR-3	MWBR-4	MWBR-4
	S	ample Date:	11/20/14	06/04/15	11/16/15	10/05/16	10/03/17	08/23/04	10/12/04	03/23/05	06/21/05	12/19/01	03/03/03
Volatile Organics	CAO Goal ¹	Units											
1,1,2-Trichloroethane	5	ug/L	8.6 J	400 U	8.8 J	5.1	2.9	0.30 U	0.30 U	0.30 U	0.30 U	2.0 U	2.8 U
1,2-Dichloroethane	5	ug/L	6,600	5,900	5,000	690	43	0.40 U	0.40 U	0.40 U	0.30 U	1,300	1,100
Chloroethane		ug/L	29	400 U	26 J	NA	18	0.40 U	0.40 U	0.40 U	0.20 U	NA	4.8 U
Chloroform	0.19	ug/L	25 U	400 U	50 U	1.0 U	2.0 U	0.30 U	0.30 U	0.30 U	0.50 U	1.9 U	2.5 U
Methylene Chloride	5	ug/L	25 U	400 U	50 U	5.0 U	2.0 UB	0.90 U	0.90 U	0.90 U	0.50 U	14	8.8 U
Tetrachloroethene	5	ug/L	25 U	400 U	50 U	1.0 U	NA	0.40 U	0.40 U	0.40 U	0.40 U	2.8 U	2.4 U
Trichloroethene	5	ug/L	10 J	400 U	13 J	10	11 J	0.40 U	0.40 U	0.40 U	1.2	21	1.2 U
cis-1,2-Dichloroethene		ug/L	6.4 J	400 U	50 U	NA	7.3	0.40 U	0.40 U	0.40 U	0.40 U	NA	3.1 U
Vinyl Chloride	2	ug/L	6.8 J	400 U	9.4 J	5.6	7.9	0.40 U	0.40 U	0.40 U	0.30 U	42	15
Carbon Digulfida	1000	un/l	25.11	400 11	50.11	1.011	NΔ	0.2011	0.2011	0.2011	0.3011	2511	3 0 11

	ı	Location I							
	Sample Da								
Volatile Organics	CAO Goal ¹	Units							
1,1,2-Trichloroethane	5	ug/L							
1,2-Dichloroethane	5	ug/L							
Chloroethane		ug/L							
Chloroform	0.19	ug/L							
Methylene Chloride	5	ug/L							
Tetrachloroethene	5	ug/L							
Trichloroethene	5	ug/L							
cis-1,2-Dichloroethene		ug/L							
Vinyl Chloride	2	ug/L							
Carbon Disulfide	1000	ug/L							

	ı	ocation ID:
	Sa	ample Date:
Volatile Organics	CAO Goal ¹	Units
1,1,2-Trichloroethane	5	ug/L
1,2-Dichloroethane	5	ug/L
Chloroethane		ug/L
Chloroform	0.19	ug/L
Methylene Chloride	5	ug/L
Tetrachloroethene	5	ug/L
Trichloroethene	5	ug/L
cis-1,2-Dichloroethene		ug/L
Vinyl Chloride	2	ug/L
Carbon Disulfide	1000	ug/L

*Notes are provided on the last page of the Appendix G table set.

Appendix G

Historical Analytical Data

2021 Annual Groundwater Performance Monitoring Report

1300 Revoluation Street

Havre de Grace, Maryland

Notes:

- 1. Values exceeding the numerical CAO goals are highlighted gray.
- 2. Duplicate sample results are provided in brackets adjacent to results presented for the parent sample location.
- 3. The reporting limit for TCE in 2021 was 10 ug/L, greater the CAO goal of 5 ug/L.

μg/L = microgram per liter

CAO = Corrective Action Objective

NA = not analyzed or measured

Laboratory Qualifiers:

- B = Indicates the presence of the analyte in the blank in addition to the sample.
- D = Compound quantitated using a secondary dilution.
- E = Analyte exceeded calibration range.
- J = Indicates an estimated value.
- U = Indicates the analyte was analyzed but not detected above the detection limit.
- UB = Compound considered non-detect at the listed value due to associated blank contamination.

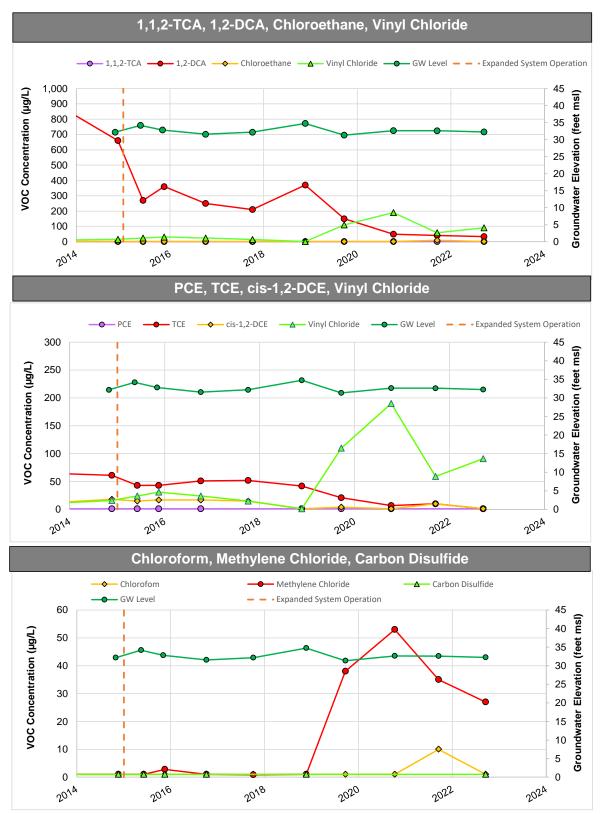


Appendix H

Trend Plots



Figure H-1
POC Well MW-3, On Site, Deep Overburden

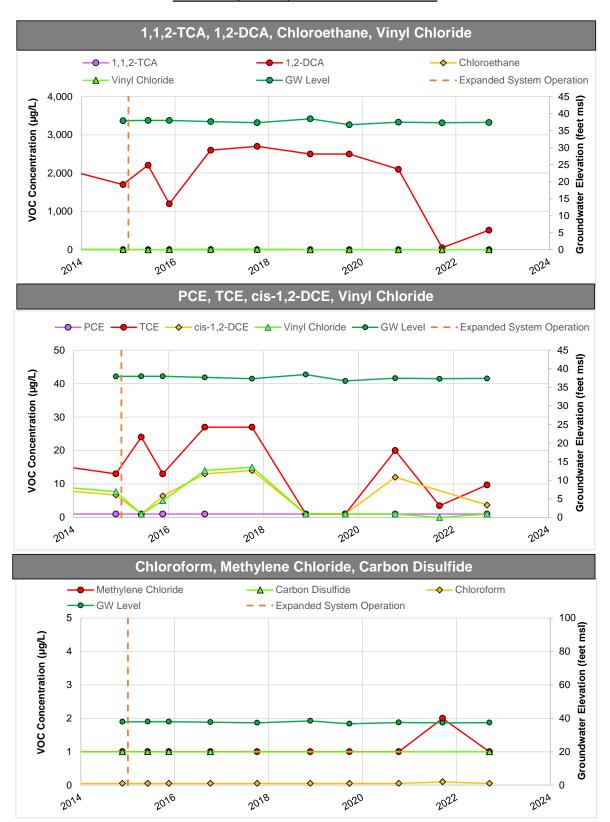


Reporting limits varied through time. For graphing purposes, nondetect values are plotted as 1 μ g/L. See historical results table for actual reporting limits.

μg/L = microgram per liter cis-1,2-DCE = cis-1,2-dichloroethene 1,2-DCA = 1,2-dichloroethane 1,1,2-TCA = 1,1,2-trichloroethane GW = groundwater msl = mean sea level



Figure H-2
Well MW-6I, On Site, Intermediate Overburden

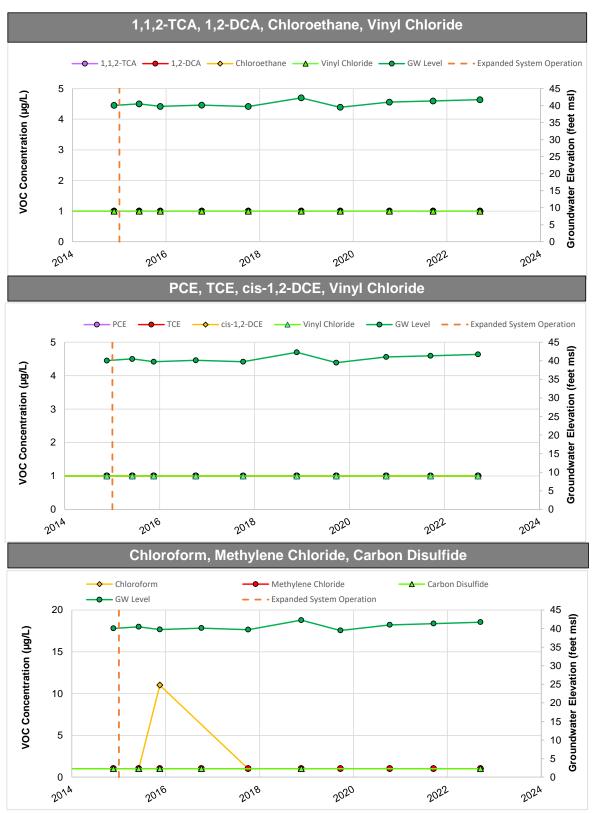


Reporting limits varied through time. For graphing purposes, nondetect values are plotted as 1 μ g/L. See historical results table for actual reporting limits.

μg/L = microgram per liter cis-1,2-DCE = cis-1,2-dichloroethene 1,2-DCA = 1,2-dichloroethane 1,1,2-TCA = 1,1,2-trichloroethane GW = groundwater msl = mean sea level



Figure H-3
POC Well MW-12S, On Site, Intermediate Overburden

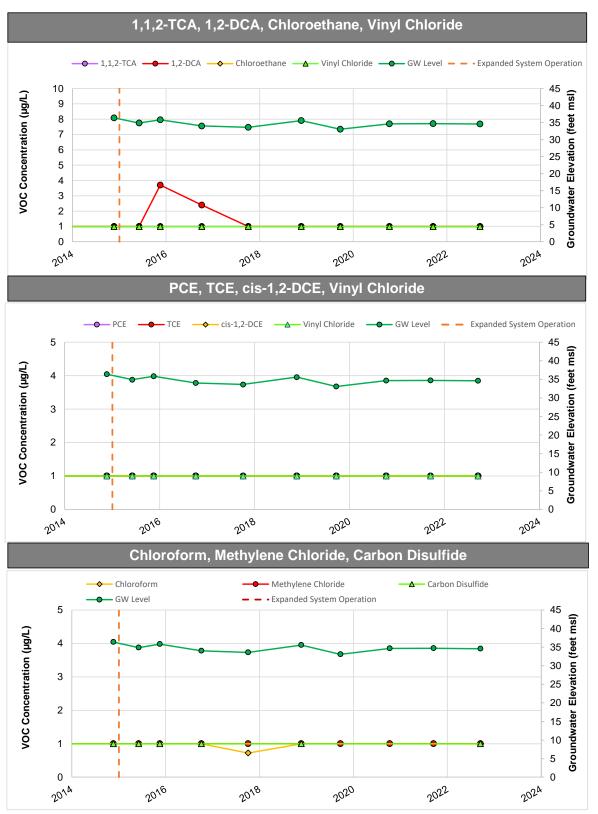


Reporting limits varied through time. For graphing purposes, nondetect values are plotted as 1 μ g/L. See historical results table for actual reporting limits.

μg/L = microgram per liter cis-1,2-DCE = cis-1,2-dichloroethene 1,2-DCA = 1,2-dichloroethane 1,1,2-TCA = 1,1,2-trichloroethane GW = groundwater msl = mean sea level



Figure H-4
POC Well MW-12D, On Site, Deep Overburden

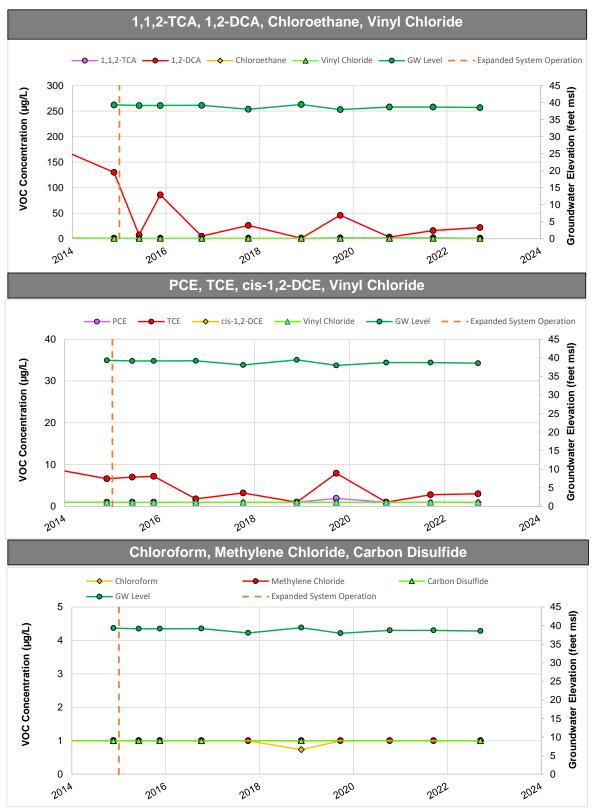


Reporting limits varied through time. For graphing purposes, nondetect values are plotted as 1 μ g/L. See historical results table for actual reporting limits.

μg/L = microgram per liter cis-1,2-DCE = cis-1,2-dichloroethene 1,2-DCA = 1,2-dichloroethane 1,1,2-TCA = 1,1,2-trichloroethane GW = groundwater msl = mean sea level



Figure H-5
POC Well MW-13D, On Site, Intermediate Overburden

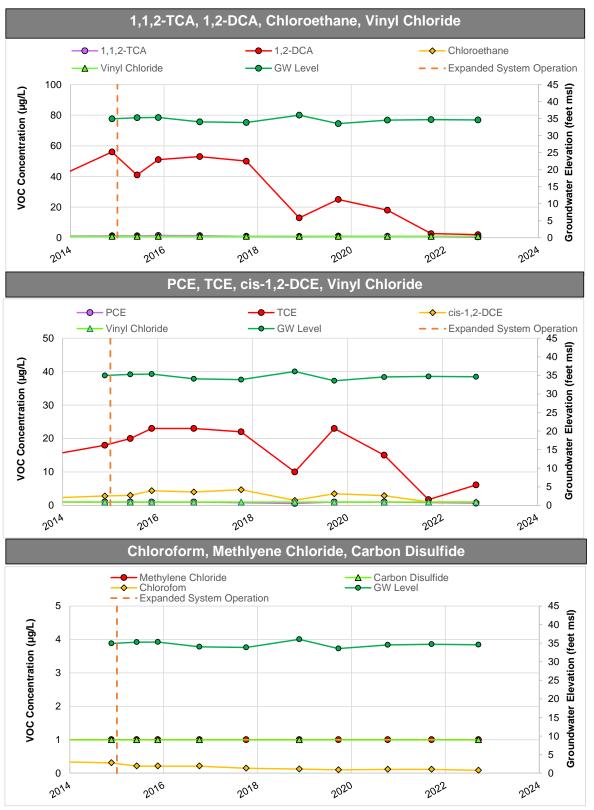


Reporting limits varied through time. For graphing purposes, nondetect values are plotted as 1 μ g/L. See historical results table for actual reporting limits.

μg/L = microgram per liter cis-1,2-DCE = cis-1,2-dichloroethene 1,2-DCA = 1,2-dichloroethane 1,1,2-TCA = 1,1,2-trichloroethane GW = groundwater msl = mean sea level



Figure H-6
Well MW-25I, On Site, Intermediate Overburden

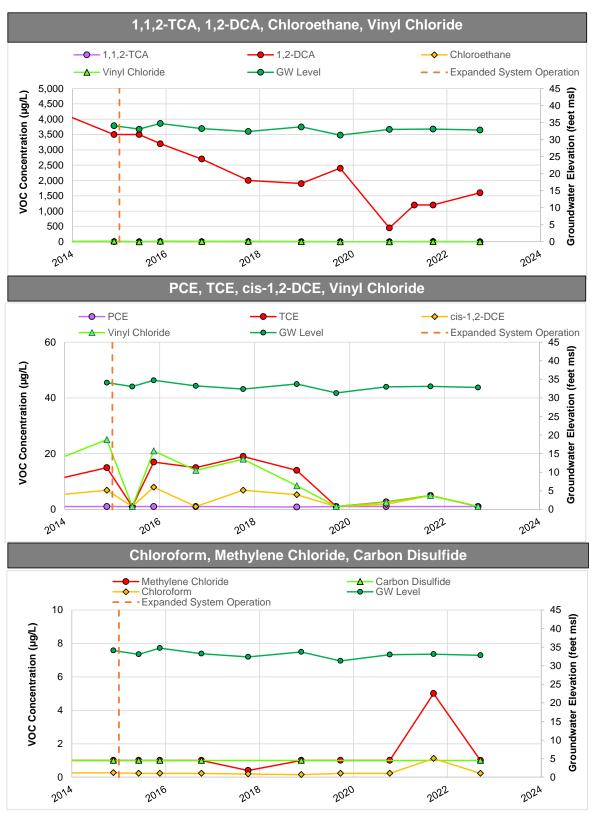


Reporting limits varied through time. For graphing purposes, nondetect values are plotted as 1 μ g/L. See historical results table for actual reporting limits.

μg/L = microgram per liter cis-1,2-DCE = cis-1,2-dichloroethene 1,2-DCA = 1,2-dichloroethane 1,1,2-TCA = 1,1,2-trichloroethane GW = groundwater msl = mean sea level



Figure H-7
Well MW-28D, On Site, Deep Overburden

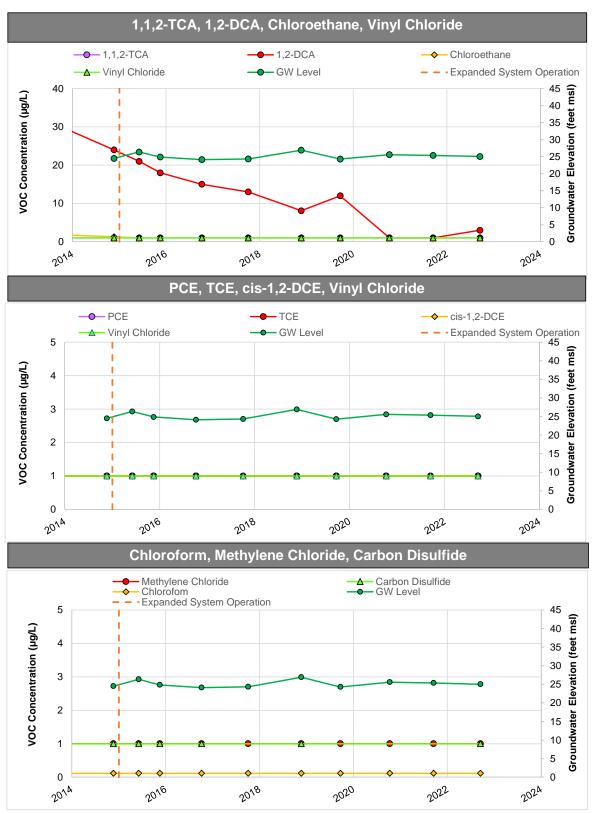


Reporting limits varied through time. For graphing purposes, nondetect values are plotted as 1 μ g/L. See historical results table for actual reporting limits.

μg/L = microgram per liter cis-1,2-DCE = cis-1,2-dichloroethene 1,2-DCA = 1,2-dichloroethane 1,1,2-TCA = 1,1,2-trichloroethane GW = groundwater msl = mean sea level



Figure H-8
Well MW-14, Off Site, Deep Overburden

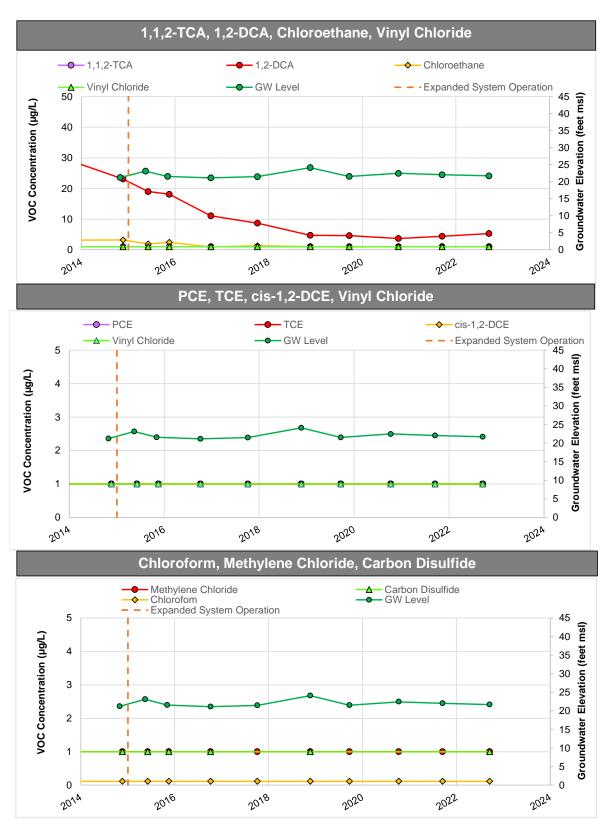


Reporting limits varied through time. For graphing purposes, nondetect values are plotted as 1 μ g/L. See historical results table for actual reporting limits.

μg/L = microgram per liter cis-1,2-DCE = cis-1,2-dichloroethene 1,2-DCA = 1,2-dichloroethane 1,1,2-TCA = 1,1,2-trichloroethane GW = groundwater msl = mean sea level



Figure H-9
Well MW-14I, Off Site, Intermediate Overburden

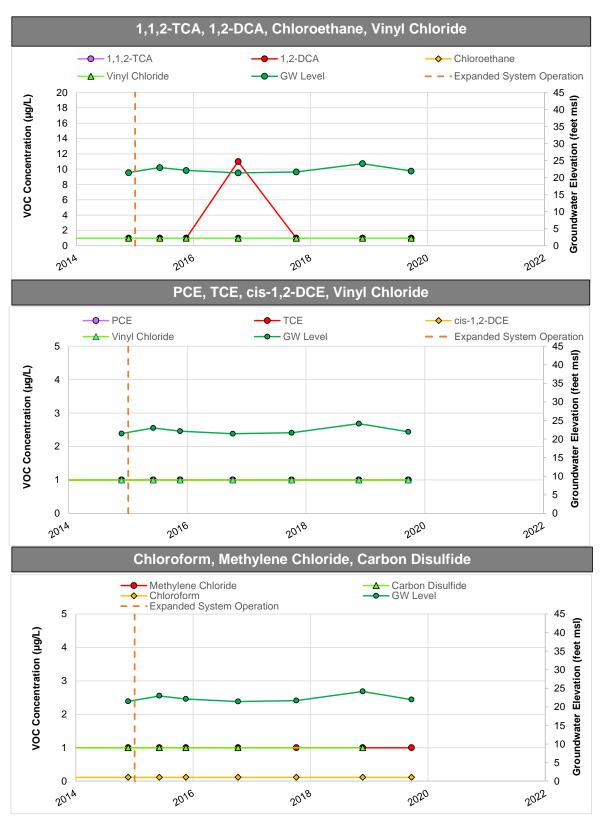


Reporting limits varied through time. For graphing purposes, nondetect values are plotted as 1 μ g/L. See historical results table for actual reporting limits.

μg/L = microgram per liter cis-1,2-DCE = cis-1,2-dichloroethene 1,2-DCA = 1,2-dichloroethane 1,1,2-TCA = 1,1,2-trichloroethane GW = groundwater msl = mean sea level



Figure H-10
Well MW-15, Off Site, Deep Overburden

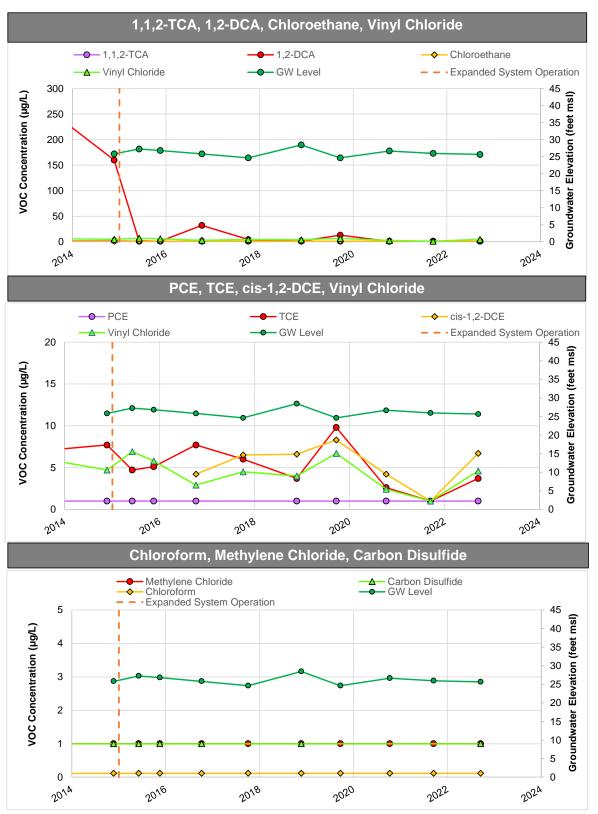


Reporting limits varied through time. For graphing purposes, nondetect values are plotted as 1 μ g/L. See historical results table for actual reporting limits.

μg/L = microgram per liter cis-1,2-DCE = cis-1,2-dichloroethene 1,2-DCA = 1,2-dichloroethane 1,1,2-TCA = 1,1,2-trichloroethane GW = groundwater msl = mean sea level



Figure H-11
Well MW-16, Off Site, Deep Overburden

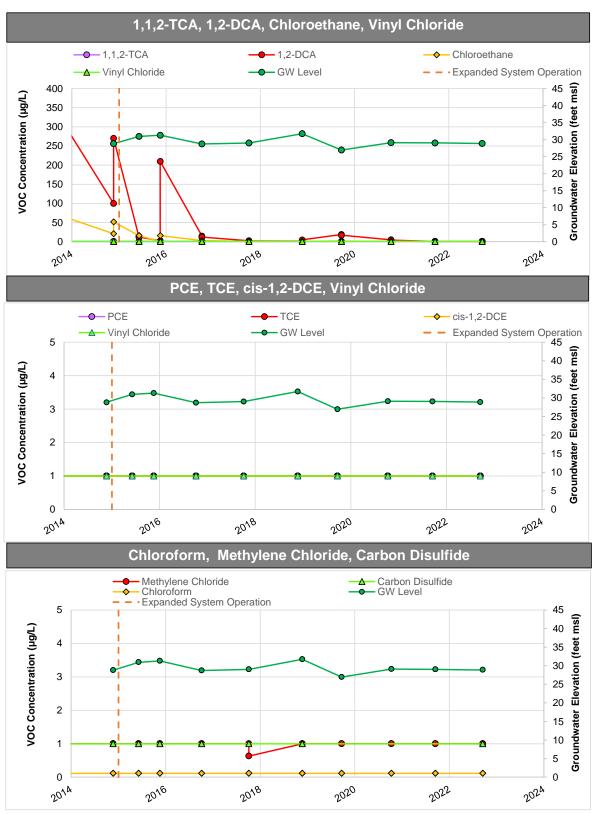


Reporting limits varied through time. For graphing purposes, nondetect values are plotted as 1 μ g/L. See historical results table for actual reporting limits.

μg/L = microgram per liter cis-1,2-DCE = cis-1,2-dichloroethene 1,2-DCA = 1,2-dichloroethane 1,1,2-TCA = 1,1,2-trichloroethane GW = groundwater msl = mean sea level



Figure H-12
Well MW-18, Off Site, Deep Overburden

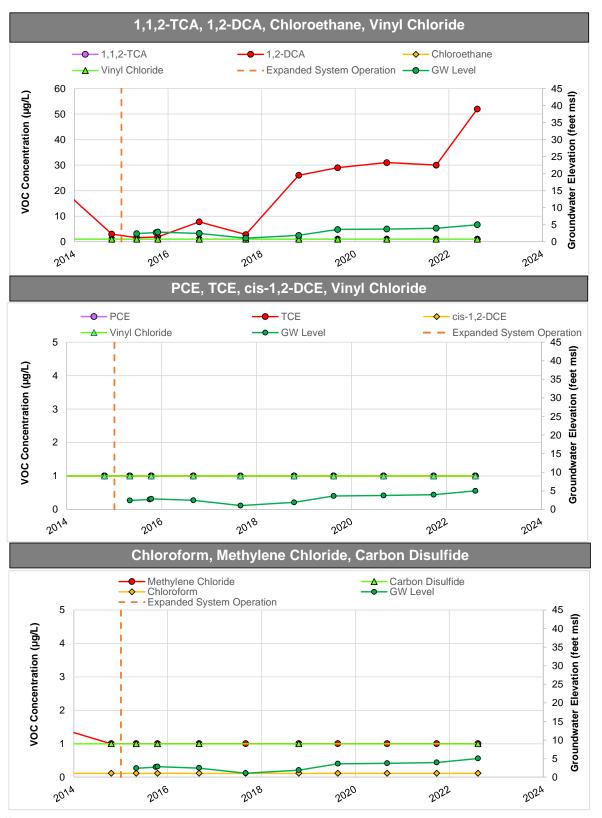


Reporting limits varied through time. For graphing purposes, nondetect values are plotted as 1 μ g/L. See historical results table for actual reporting limits.

μg/L = microgram per liter cis-1,2-DCE = cis-1,2-dichloroethene 1,2-DCA = 1,2-dichloroethane 1,1,2-TCA = 1,1,2-trichloroethane GW = groundwater msl = mean sea level



Figure H-13
POC Well MW-19D1, Off Site, Deep Overburden

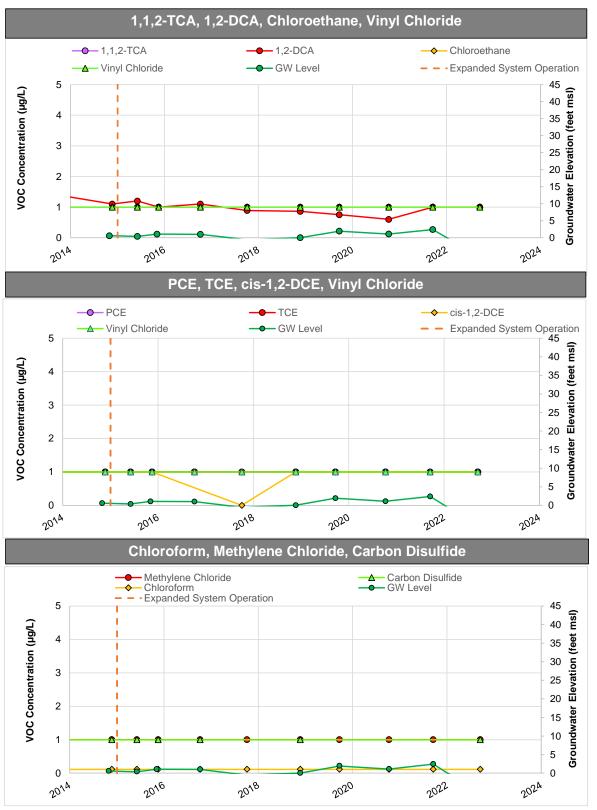


Reporting limits varied through time. For graphing purposes, nondetect values are plotted as 1 μ g/L. See historical results table for actual reporting limits.

μg/L = microgram per liter cis-1,2-DCE = cis-1,2-dichloroethene 1,2-DCA = 1,2-dichloroethane 1,1,2-TCA = 1,1,2-trichloroethane GW = groundwater msl = mean sea level



Figure H-14
POC Well MW-20D1, Off Site, Deep Overburden

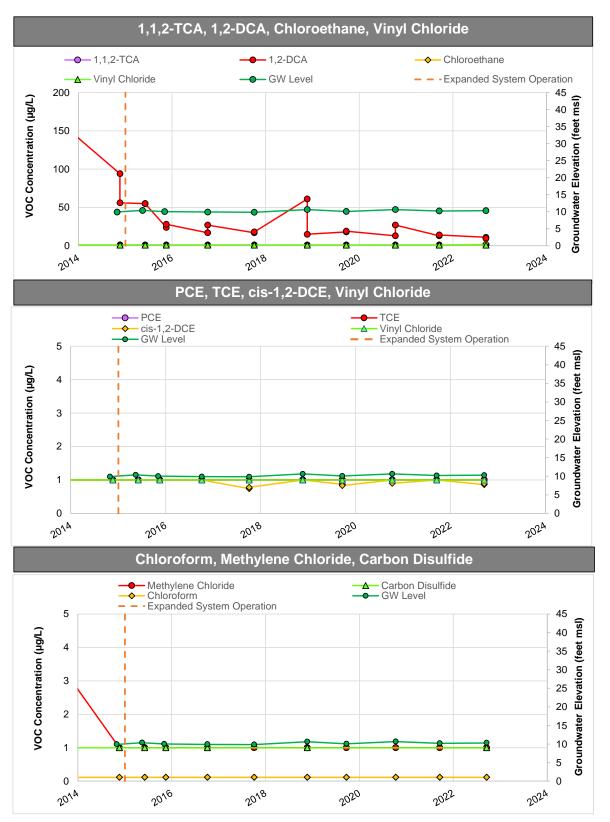


Reporting limits varied through time. For graphing purposes, nondetect values are plotted as 1 μ g/L. See historical results table for actual reporting limits.

μg/L = microgram per liter cis-1,2-DCE = cis-1,2-dichloroethene 1,2-DCA = 1,2-dichloroethane 1,1,2-TCA = 1,1,2-trichloroethane GW = groundwater msl = mean sea level



Figure H-15
Well MW-23, Off Site, Deep Overburden

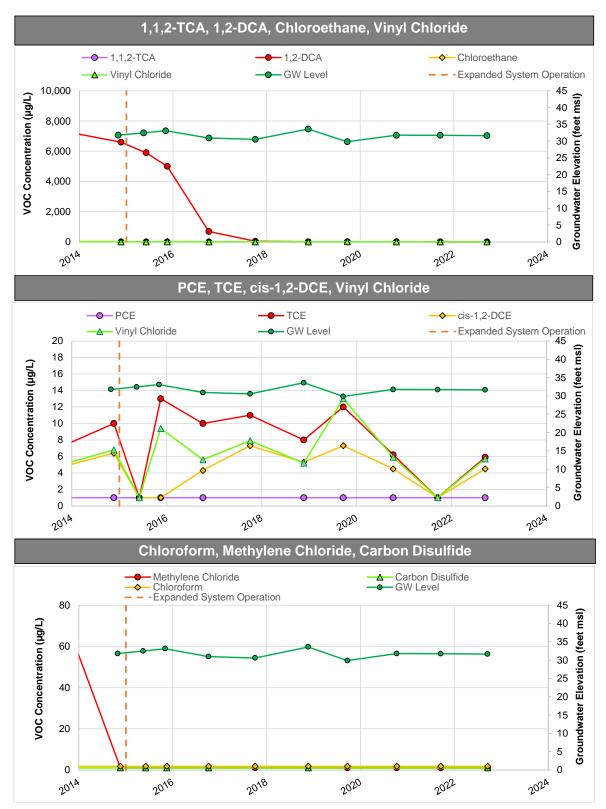


Reporting limits varied through time. For graphing purposes, nondetect values are plotted as 1 μ g/L. See historical results table for actual reporting limits.

μg/L = microgram per liter cis-1,2-DCE = cis-1,2-dichloroethene 1,2-DCA = 1,2-dichloroethane 1,1,2-TCA = 1,1,2-trichloroethane GW = groundwater msl = mean sea level



Figure H-16 Well MW-27, Off Site, Deep Overburden



Notes:

Reporting limits varied through time. For graphing purposes, nondetect values are plotted as 1 µg/L. See historical results table for actual reporting limits.

µg/L = microgram per liter cis-1,2-DCE = cis-1,2-dichloroethene 1,2-DCA = 1,2-dichloroethane

1,1,2-TCA = 1,1,2-trichloroethane GW = groundwater msl = mean sea level